INFANT HEARING PROGRAM
Maryland Department of Health and Mental Hygiene
Family Health Administration
Office for Genetics and Children with Special Health Care Needs
201 West Preston Street, Room 423 A, Baltimore, MD 21201
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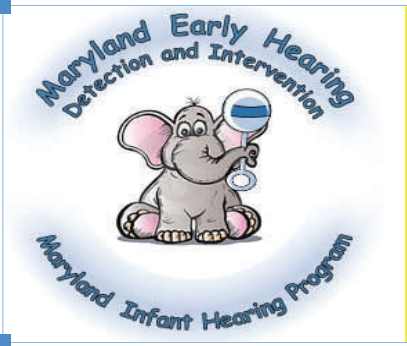
John M. Colmers, Secretary



Infant Hearing News September 2009

MD EHDI

Summer was a busy time for the Infant Hearing Program, with visits to many of our state's birth hospitals. This year the visits focused on how implementation of the eSP database has impacted hospital operations. We gathered some very good feedback and subsequently were able to troubleshoot a number of issues before they became problems. The visits also gave us the opportunity to demonstrate the power of this database to the hospital staff. Many sites did not realize the potential of the database in creating reports, determining statistics, etc., both for their UNHS programs as well as for hospital-specific applications.

The Infant Hearing Program also hosted the annual Stakeholders Meeting over the summer. The meeting, held on August 14th at the Hearing and Speech Agency in Baltimore, was a big success. We had several very good speakers, including Wendy Hanks, PhD from Gallaudet University, who gave the keynote address: "Syndromal Hearing Loss." A very moving talk was given by Melissa Schropp, mother of a child with hearing loss. The meeting ended with a special panel presentation: "Early Intervention: What is it, where to find it, and how does it work?" The panel included representatives from the Maryland State Department of Education, Prince George's County Infant and Toddler Program, Hearing and Speech Agency, and the Maryland School for the Deaf. The panel shared practical information about early intervention services access and availability, and facilitated stimulating discussion regarding deaf, and hard of hearing early intervention issues. We would like to thank all of the speakers as well as the attendees for making the meeting so useful and informative.

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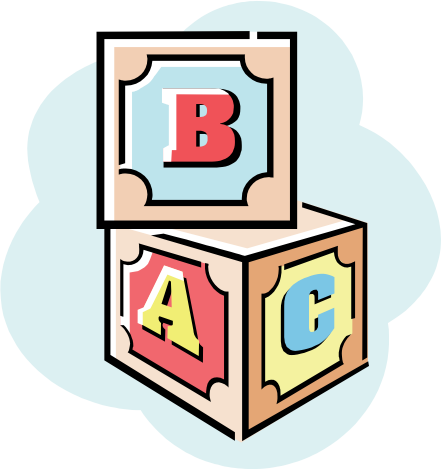
In the News

Program Improves Language Skills in Deaf, Hard of Hearing

Reported by: Cincinnati Children's Hospital Medical Center

http://www.cincinnatichildrens.org/about/news/release/2009/

Monday, May 04, 2009



Children enrolled before they are six months old in a home-based program that teaches language skills to the deaf or hard of hearing are not only able to achieve appropriate language skills but also to maintain them over time, according to a new study.

The study underscores the importance of appropriate follow-up of newborn hearing screens that determine whether a more detailed evaluation of a baby's hearing by an audiologist is needed, according to Jareen Meinzen-Derr, PhD, a researcher at Cincinnati Children's Hospital Medical Center and the study's main author.

Dr. Meinzen-Derr will present her study Monday May 4 at the annual meeting of the Pediatric Academic Societies in Baltimore.

The researchers studied 328 children enrolled in Ohio's universal newborn hearing screening program. As is the case in many states, all infants born in Ohio hospitals or birthing centers receive hearing screenings before discharge. These screenings determine whether a more detailed evaluation of a baby's hearing is needed.

Newborns enrolled before 6 months of age were more likely to have age appropriate language skills than children enrolled at or after 6 months, the study found. They also maintained age appropriate skills through the age of 3 – the age at which early intervention services cease. Children enrolled at or after six months had lower baseline language skills but made significant language progress, possibly catching up to the group enrolled at an earlier age, irrespective of severity of hearing loss, according to Dr. Meinzen-Derr. The researchers did not study children past the age of three to determine the level of their language skills.

"It is important for pediatricians and family physicians to ensure that families follow up on initial screenings that indicate a possible problem with a more thorough evaluation," says Susan Wiley, M.D., a developmental pediatrician at Cincinnati Children's and a co-author of the study. "Early intervention can and does have a great impact. We need to preserve early intervention services during these difficult economic times."

In the News (cont)

Program Improves Language Skills in Deaf, Hard of Hearing (cont)

Approximately 150,000 children are born in Ohio each year. About 6,000 of them do not pass their newborn hearing screening. Ohio infants who are identified with a permanent hearing loss are eligible for home-based language education, assistance with audiology follow-up appointments, connections to community resources, planning for transition to preschool and other services – all at no cost to families. The Regional Infant Hearing Programs in Ohio are funded by the Ohio Department of Health.

The PAS meeting is the largest international meeting focused on research in child health. It is sponsored by the American Academy of Pediatrics, the American Pediatric Society, the Society for Pediatric Research, and the Ambulatory Pediatric Association.

Estrogen impacts how the brain processes sound

A study published in the May 5, 2009 issue of The Journal of Neuroscience shows that estrogen directly affects auditory function. The study's lead author Raphael Pinaud, Assistant Professor of Brain and Cognitive Sciences at the University of Rochester, and his team of researchers showed that raising estrogen levels in brain regions that process auditory information increased the sensitivity of the sound processing neurons. Conversely, when those regions of the brain were denied estrogen, there was essentially no signaling for the brain to process sound. The hormone played a central role in how the brain extracted and interpreted auditory information. Pinaud's study also found that the genes that instruct the brain to form memories of sounds cannot be activated without estrogen. This study, which is the first to show that a sex hormone can directly affect auditory function, also indicates the possibility that estrogen impacts other types of sensory processing as well. The study's authors believe that this new understanding of how estrogen changes the brain's response to sound may lead to new ways of treating hearing loss.

Did you know?

Studies indicate that roughly 25% of bilateral childhood hearing loss is post-natal. (Weichbold, et al *Pediatrics*, April 2006)

Financial Aid

A G Bell Parent-Infant Financial Aid Program

AG Bell's Parent-Infant Financial Aid Program was established in 1986 to provide financial aid support to families of infants who have been diagnosed with a moderate to profound hearing loss who are in pursuit of spoken-language education for their child. Grants are awarded to attenuate expenses associated with obtaining services such as auditory support services, speech-language therapy, tuition, etc. Families who apply should be committed to a listening and spoken-language outcome for their child.

Eligibility requirements

Applicants for this program are required to meet the following criteria:

- The child must be three years old or younger as of December 31, 2009.
- The child must have a documented bilateral hearing loss.
- Hearing loss must be within the moderate to profound range.
- Spoken communication must be the child's primary mode of communication.
- Applicant must be a resident of the United States (including territories) or Canada.
- Parents/guardians must demonstrate financial need.

Submission requirements:

Documentation required with the application includes:

- A copy of the unaided audiogram,
- Recommendation from a hearing health or therapeutic professional,
- Recommendation from a current AG Bell member, and
- Recommendation from a non-relative who is familiar with the family's financial need.

Applications are available on the AG Bell website, *www.agbell.org*. To be considered, the application and all accompanying documents must be received at AG Bell by 5 p.m. EDT on October 1, 2009.

Did you know?

Hearing loss can negatively affect household income by up to $12,000 per year.

(Sergei Kochkin, PhD *The Hearing Review*, October 2005)

For our eSP system users

As more and more caregivers are utilizing this database, it is important that the files in eSP are as complete and accurate as possible. Here are a few aspects to keep in mind as you use the database.

While the infants are still inpatient, please be sure to:
-**Import your demographic data daily** - and review your imports to check for any corrupted files. Oz Systems can assist you with any technical issues if you have questions.
-**Upload your hearing screen results from your screening equipment** - in addition to saving you time, this process has the added advantage of eliminating data-entry errors.
-**Review manual entries before moving to the next file** - when selecting choices from the various drop down boxes, be very careful that the highlight remains on the appropriate value as you save your selection.
-**Enter the pediatrician as a professional contact** - if you are unable to find a particular pediatrician in the current contact list, please notify the Infant Hearing Program and that professional will be immediately added to the database. Pediatricians and other professionals can also be added by their practice name.

As the infants move through the outpatient centers, please be sure to:
-**Review and update demographic information** - please confirm that the file reflects the infant's permanent name, and that the address and phone numbers for the parents are complete and correct.
-**Review and update provider contact information** - the pediatrician information is critical to our follow-up efforts. It is also very important that you add providers to the file when you refer to them. No provider can access individual files until their name has been added as a professional contact.
-**Edit the appointment date fields** - if you make or know of any of the infant's upcoming appointments, be sure to enter that information. It is always best if we do not have to unnecessarily disturb you, the pediatrician, or the parents for this information.
-**Add your data in a timely manner** - again, many others will need access to the infant's file quickly if we are to be successful in meeting the national 1-3-6 Guidelines of: Screening by age 1 month, Diagnosis by age 3 months, and Intervention by age 6 months.

Finally, it is very important to remember that the eSP file is a medical record - all of the rules that apply to your individual site medical records apply to eSP records as well.

Diagnosis and Procedure Codes

The following is a partial listing of common diagnosis and procedure codes for services related to newborn hearing screening and evaluation.

Diagnosis Codes (2009 ICD-9-CM)

380.4 Impacted cerumen

381.10 Chronic serous otitis media, simple

389.05 Conductive hearing loss, unilateral

389.11 Sensorineural hearing loss, bilateral

389.12 Neural hearing loss, unilateral

389.16 Sensorineural hearing loss, asymmetrical

389.22 Mixed hearing loss, bilateral

744.1 Accessory auricle (skin tag, etc)

381.10 Acute serous otitis media

381.81 Dysfunction of Eustachian tube

389.06 Conductive hearing loss, bilateral

389.12 Neural hearing loss, bilateral

389.15 Sensorineural hearing loss, unilateral

389.21 Mixed hearing loss, unilateral

744.01 Absence of external ear; external aud. canal

744.23 Microtia

Procedure Codes (CPT 2009)

69210 Removal of impacted cerumen (separate procedure) *one or both ears*

92567 Tympanometry

92568 Acoustic reflex testing

92579 Visual Reinforcement Audiometry (VRA)

92585 Auditory evoked potentials (ABR) for evoked response audiometry and/or testing of the central nervous system; *comprehensive*

92586 Auditory evoked potentials (ABR) for evoked response audiometry and/or testing of the central nervous system; *limited*

92587 Evoked otoacoustic emissions; *limited* (single stimulus level, either transient or distortion product

92588 Evoked otoacoustic emissions; *comprehensive or diagnostic evaluation* (comparisons of transient and/or distortion product emissions at multiple levels and frequencies)

Modifiers (CPT 2009)

-25 Significant Separately Identifiable Evaluation and Management Service by the Same Provider on the Same Day of the Procedure or Other Service

-50 Bilateral Procedure: performed at the same operative session

-51 Multiple Procedures: performed at the same session by the same provider

-52 Reduced Services: partially reduced or eliminated

-53 Discontinued Procedure

Federal Legislation

House Committee Passes Student Aid and School Modernization Bill

The House Education and Labor Committee passed H.R. 3221, the Student Aid and Fiscal Responsibility Act of 2009. This bill provides $5 billion in funding for the 21st Century Green High-Performing Public School Facilities Act (see Section 345 of H.R. 3221). Already passed by the Education and Labor Committee and the House of Representatives, the Green Schools Act would allow states and school districts to take measures designed to reduce or eliminate human exposure to classroom noise and environmental noise pollution.

News from AAA

Ototoxicity Monitoring

The American Academy of Audiology (AAA) has released a document entitled *American Academy of Audiology Position Statement and Practice Guidelines on Ototoxicity Monitoring*. This document is a draft that is being released for member review and comments and is open until September 1, 2009. All Academy members are invited to review these guidelines and to forward any comments to the Academy. The document can be found on the Academy website *http://www.audiology.org/*. Any comments or questions should be addressed to Pat Kricos, Strategic Documents Chair, at email: *pkricos@ufl.edu.*

Did you know?

Over 4,000,000 babies were born in the US (states and territories) in 2007.

Resources

We have a number of resources available on our website:

www.fhamd.org/infant hearing

Some of these resources include:

- Infant Hearing Newsletters – past and current editions
- Informational pamphlets and brochures – some available in Spanish
- Patient Education forms
- Guidelines and Checklists
- Links to other helpful sites

As always, the staff at Maryland DHMH is happy to assist you in any way we can. The Infant Hearing Program toll free phone number is 800-633-1316, our toll free TTY number is 866-635-4410, and the office fax number is 410-333-5047. Individually, we can be reached by phone or email:

Linda Vaughan, Program Director

410-767-6432 *LSVaughan@dhmh.state.md.us*

Erin Filippone, Program Audiologist

410-767-6762 *EFilippone@dhmh.state.md.us*

Theresa Thompson, Follow-up Coordinator

410-767-5093 *TThompson@dhmh.state.md.us*

Stephanie Hood, Follow-up Coordinator

410-767-6659 *SHood@dhmh.state.md.us*

Hope Wharton, Administrative Assistant

410-767-5803 *HWharton@dhmh.state.md.us*

This newsletter is intended to serve as a communication vehicle for all UNHS stakeholders. If you have any patient interest stories, photos, announcements, helpful hints, questions, or any information you would like to share with your Maryland colleagues, please email them to Erin Filippone at *EFilippone@dhmh.state.md.us.*

WORKING TOGETHER… EARLY HEARING DETECTION AND INTERVENTION

THE KEY TO COMMUNICATION SUCCESS

The services and facilities of the Maryland Department of Health and Mental Hygiene (DHMH) are operated on a non-discriminatory basis. This policy prohibits discrimination on the basis of race, color, sex, or national origin and applies to the provisions of employment and granting of advantages, privileges, and accommodations.

The Department, in compliance with the Americans With Disabilities Act, ensures that qualified individuals with disabilities are given an opportunity to participate in and benefit from DHMH services, programs, benefits, and employment opportunities.