



# *INFANT HEARING NEWS*

## Introducing...the Infant Hearing Newsletter!

We are excited to launch the Infant Hearing Newsletter for providers of hearing screenings. The purpose is to facilitate communication between providers and the Infant Hearing Program at the Maryland Department of Health and Mental Hygiene, thereby improving services for all Maryland babies. Topics will include information about state regulations, recommended protocols, screening tips, and your contributions. Feel free to forward this newsletter to anyone who may be interested, or send us email addresses you would like to have added to our distribution list.

### *Who we are*

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### *Favorite Links*

 Maryland Infant Hearing Program website:

[http://www.fha.state.md.us/genetics/html/inf\\_hrg.html](http://www.fha.state.md.us/genetics/html/inf_hrg.html)

 Maryland Infants and Toddlers Program and Preschool Special Education Services

[http://marylandpublicschools.org/MSDE/divisions/earlyinterv/infant\\_toddler/s/message.htm](http://marylandpublicschools.org/MSDE/divisions/earlyinterv/infant_toddler/s/message.htm)

- Maryland State Regulations: <http://mlis.state.md.us/1999rs/bills/hb/hb0884e.rtf>
- ◆ American Academy of Pediatrics: Newborn and Infant Hearing Screening Activities: <http://www.medicalhomeinfo.org/screening/hearing.html>
- National Center for Hearing Assessment & Management: Newborn Hearing Screening: <http://www.infanthearing.org/screening/index.html>
- ✱ National Institute on Deafness and Other Communication Disorders: Has your baby's hearing been screened? <http://www.nidcd.nih.gov/health/hearing/screened.asp>

## *Did you know...*

- ...that **HEARING LOSS IS THE MOST COMMON CONGENITAL CONDITION IN THE UNITED STATES?** The overall estimates are between 1 to 6 per 1,000 newborns. Most children with congenital hearing loss have hearing impairment at birth and are potentially identifiable by newborn and infant hearing screening. However, some congenital hearing loss may not become evident until later in childhood.
- According to Blanchfield, et. al., as many as 738,000 individuals in the U.S. have severe to profound hearing loss. Of these, almost 8% are under the age of 18.
- Among African-American, Cuban-American, Mexican-American, Puerto Rican, and non-Hispanic White children, it is estimated that approximately 391,000 school-aged children in the U.S. have unilateral hearing loss.

- According to Niskar and colleagues, approximately 14.9% of U.S. children have low-frequency or high-frequency hearing loss of at least 16-dB hearing level in one or both ears.
- Profound, early-onset deafness is present in 4-11 per 10,000 children, and is attributable to genetic causes in at least 50% of cases.

\*Statistics retrieved from the American Speech-Language-Hearing Association website on 03/27/2006:  
<http://www.asha.org/public/hearing/disorders/children.htm>

The Joint Committee on Infant Hearing recommends using the **1-3-6** method. All babies are to be screened, and rescreened if needed, for hearing loss by the **1**st month of life. A definitive diagnosis of hearing loss should be obtained by **3** months of age so that intervention can begin by **6** months of age<sup>1</sup>.

Early intervention is the key to normal speech and language development<sup>2</sup>! Studies have shown that when intervention for hearing loss begins by 6 months of age rather than 18 months (the average age of identification without a UNHS program), the potential to develop normal speech and language skills is much greater. Even children with minimal or unilateral hearing losses are at risk for decreased academic achievement<sup>3 4</sup>.

Hearing loss identification is definitely a team effort requiring lots of coordination. While the Maryland Department of Health and Mental Hygiene (DHMH) is the lead agency for the Infant Hearing Program, parents, hearing screening technicians, nurses, audiologists, pediatricians, appointment schedulers, insurance carriers, and early interventionists are key members of the team. Moving through the various, often

<sup>1</sup> Yoshinaga-Itano, C., & Apuzzo, M. (1998). [Identification of hearing loss after 18 months is not early enough. American Annals of the Deaf, 143, 380-387.](#)

<sup>2</sup> Downs, M.P., & Yoshinaga-Itano, C. (1999). [The efficacy of early identification and intervention for the child with hearing impairment.](#)  
 In N. J. Roizen & A. O. Diefendorf (Eds.), *Pediatric Clinics of North America*, 46, 79-87.

<sup>3</sup> Bess FH, Tharpe AM, Gibler AM (1986). Auditory performance of children with unilateral sensorineural hearing loss. *Ear & Hearing*, 7(1):20-6.

<sup>4</sup>Boys Town National Research Hospital. Information on Hearing Loss – Unilateral Hearing Loss.  
<http://www.boystownhospital.org/Hearing/info/unilateral.asp>

complicated, phases of the 1-3-6 can be quite a challenge. As the baby's first link in the 1-3-6 chain, here are some ways that you can help us reach our goal:

- ❖ If a baby does not pass the first screen, try to repeat the screen before the baby is discharged.
- ❖ If a baby does not pass the hospital screening, *set up an appointment before the baby is discharged* to return for a repeat screening.
- ❖ Give a paper copy of the screening results to the mother with a phone number to call to schedule an appointment. Make sure that the results of the screening and the follow-up instructions are communicated and understood by mom.
- ❖ Obtain the mother's and pediatrician's current contact information.
- ❖ Send the *final* results of the screening to the baby's pediatrician or provide mom with a results form with instructions for her to share it with her baby's pediatrician.
- ❖ If a baby passes a screening after the metabolic card is sent to the Maryland Department of Health, notify the state by faxing the results and the demographic information to **410-333-5047**. You can use a Level 2 form (available on our website: [http://www.fha.state.md.us/genetics/html/inf\\_hrg.html](http://www.fha.state.md.us/genetics/html/inf_hrg.html)) with a notation that indicates this is the baby's first screening. This will help us to follow up with the families that need further testing.
- ❖ If a baby does not pass the repeat screen, refer the baby for a diagnostic hearing test WITH AN AUDIOLOGIST whenever possible. Audiologists are uniquely qualified to evaluate an infant's hearing status and are the providers of hearing health services. If you need help with where to refer babies for a diagnostic test, please call us at 800-633-1316.

As we work together for the benefit of all our babies, we hope to reduce the average age of identification so that those with hearing loss can get off to a better start with speech and language development. For more information, see our National Goals and Program Objectives For the EHDI Tracking and Surveillance System at <http://www.infanthearing.org/programevaluation/standards.html>. A poster titled "Just in Time" is also available from the CDC at (<http://www.cdc.gov/ncbddd/ehdi/documents/justintime/136poster.pdf>) to help remind those involved with newborn hearing screening about the '1-3-6' principle.

## Resources and News

Do you know a pediatrician caring for a child just identified with hearing loss? The American Academy of Pediatrics is offering an EHDI PediaLink® module scholarship to medical home providers. For more information, see the AAP Newborn and Infant Hearing Screening Activities webpage at <http://www.medicalhomeinfo.org/screening/hearing.html>.

## Tricks of the trade

You have experience, you've screened dozens of babies, you know how to get the babies quiet, you've mastered the technique...so why aren't the babies passing? Check the probe! Ongoing hearing screening activities will eventually lead to the accumulation of debris inside the probe opening. This debris can interfere with the level of the stimulus entering the babies' ears, as well as with the ability of the equipment to detect low-level emissions from the cochlea if using OAE's. Here are some things to try if you think the probe is clogged:

- ④ Change the probe tip.
- ④ Hold the probe facing *downward* and use a small brush to remove the debris from the opening. You don't want the debris to get pushed further into the probe!
- ④ Check the user's manual for proper probe cleaning procedures of your equipment.
- ④ Keep an extra probe on hand in case the probe becomes clogged or non-functioning while screening babies.
- ④ Calibrate the equipment regularly. Consult your user's manual or call your equipment representative for instructions.

It is also a good idea to keep pass/fail statistics for each piece of equipment used so that changes in those rates will be obvious when they occur.

Do you have any screening tips you would like to share with your colleagues? Let us know!

## Coming attractions

### *Recommended screening and diagnostic protocols from the Maryland UNHS Advisory Council*

The Advisory Council is finalizing recommended Level 1, Level 2, and Level 3 test protocols. These will be made available on our website, but you can send us your mailing address if you would like a paper copy.

### *Expanded website*

For easier access, reporting forms, brochures, and resources for the Maryland Infant Hearing Program are now available on our website:

[http://www.fha.state.md.us/genetics/html/inf\\_hrg.html](http://www.fha.state.md.us/genetics/html/inf_hrg.html). Check it out!

### *Web based data tracking system*

The procurement process for a statewide web-based data management system is underway. We hope to get the system up and running sometime in 2007, which should greatly increase our ability to track babies, communicate with screening personnel, and generate statistics.

### *Annual meeting for EHDI providers in Maryland*

We want to create a forum for screening personnel to be able to share their experiences and expertise with one another, and also for training and continuing education opportunities. Our first meeting is tentatively scheduled for the summer, so keep an ear out for more details.

## Feedback

Send us your comments!

- ✧ What topics would you like to see in future newsletters?
- ✧ What can the Maryland Infant Hearing Program do to support you?
- ✧ Are there any success stories or lessons learned that you want to share with other sites?
- ✧ Do you have a cute baby picture that must be seen?

Email us at [LSVaughan@dhmh.state.md.us](mailto:LSVaughan@dhmh.state.md.us).

## Contact Information

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***\*WORKING TOGETHER TO IMPROVE COMMUNICATION IN  
MARYLAND\****