

Maryland Department of Health and Mental Hygiene

Family Health Administration

Office of Genetics and Children with Special Health Care Needs

201 West Preston Street, Room 423 A Baltimore, MD 21201

Martin o' Malley, *Governor* Anthony G. Brown, *Lt. Governor*

John M. Colmers, *Secretary*



Infant Hearing News May 2007

May is Better Hearing and Speech Month!

We would like to take this opportunity to recognize you, the people who work hard every month toward the goal of better hearing and speech for all of Maryland's babies. In 2006, 71,333 babies were born in Maryland. Of these, 69,628 had a hearing screening before leaving the hospital. That's a screening rate of 97.6 percent, and we know, the work doesn't stop after discharge! Last year, 4,904 babies received a second level screening and 203 had diagnostic evaluations which identified 90 babies with hearing loss. So, who is doing all this work? You are...

[The staff at Maryland's 35 birth hospitals](#)

As the ones who start the identification process, you are the first link in the chain. You are responsible for screening every baby born at your site and documenting to the state each baby's hearing status at discharge. We appreciate the efforts you make to provide us with accurate results and all the parent and pediatrician information we need to keep track of those babies – especially those who do not pass the screening or who are missed.

It can be a monumental task with a great deal of paperwork: log books, documenting charts, letters to pediatricians, parents and the state, and there are a lot of difficulties ensuring follow-up, but hopefully we are helping the babies."

Pam Shaw, RN

St. Mary's Hospital, Leonardtown



The doctors and staff of the infant's primary care facility



You are the ones the infant's family turns to for advice (and those pesky insurance referrals). You are responsible for ensuring each of your infant patients has been screened and passed, or has been referred for further testing. We very much appreciate your support in encouraging the families to pursue any additional testing that may be required, and for communicating with us to keep us up to date on the status of their hearing.

The fact that we have the State Health Department to follow these children helps the primary care physician as far as having another set of "eyes" on the child to follow their progress, especially in cases where the patients move from office to office. I think all offices should realize that instead of this being more paperwork, in fact, it is ultimately a wonderful tracking device available for our patients.

Tammy Roberts, Patient Care Coordinator
Partners in Pediatrics, Hagerstown

The Audiologists

You are responsible for making the definitive diagnosis of normal hearing or hearing impairment. You also initiate treatment and make any of the necessary referrals to otolaryngologists, infant and toddler programs, genetics counseling, and other appropriate specialties as well as providing amplification and aural habilitation services. We appreciate your skill in identifying and coordinating treatment for these infants, and for communicating with us to ensure they receive all the services they need.



When I conduct diagnostic testing, I become almost as anxious for the results as the parents. Telling parents that their baby has a hearing loss is still one of the most difficult parts of my profession. At the same time, I also become excited because I know that with appropriate early intervention, this baby has the potential to develop speech and language just like his or her peers.

Mei Ling Chen, Au.D.
St. Agnes Hospital, Catonsville

To all of you, thank you for your diligence and commitment to the hearing health of Maryland's babies. You are all a part of the Universal Newborn Hearing Screening team, and it is only through your efforts that we can meet the goals of early hearing identification and intervention. We can't do it without you. So keep those cards, letters, emails, and faxes coming. Your communication with the state is key to ensuring that the 1-3-6 circle is completed...*screening by one month, identification by three months, and intervention by six months.*

Early Identification and Intervention Makes a difference!

Researchers continue to report that the earlier a hearing loss is found and treated, the better the communication outcome for the child.

“Deafness is an invisible disability,” says [Christine Yoshinaga-Itano](#), chair of the [Speech, Language, and Hearing Sciences](#) department at the University of Colorado at Boulder. “When you look at a child who can’t hear, they look like another child, and they actually coo back at you, and they look as if they’re responding to the sounds of their environment. So it’s very, very difficult for parents to tell even when their children can’t hear anything.” Yoshinaga-Itano studied young children with hearing loss and found that the earlier it’s found, the better. “It’s as if, when the child is delayed in language development, they’re chasing after a racing train that gets faster and faster as time goes on,” explains Yoshinaga-Itano. “So, the longer it takes to identify the hearing loss, the further behind, the faster they’re going to have to run if they’re going to catch up.”

Dr. Yoshinaga-Itano’s ground breaking work proved that intervention by six months of age is critical for the development of normal language and communication skills for babies with hearing impairment, and that delaying the process of identification and intervention can lead to developmental lags that are permanent.

“Language development is positively and significantly affected by the age of identification of the hearing loss and age of initiation into intervention services. Both speech development and social-emotional variables are highly related to language development.”

“...the first 6 months of life represents a particularly sensitive period in early language development, a window of opportunity for initiation of intervention services. Access to language during this period provides an opportunity for children with significant hearing loss to develop language skills that are slightly depressed from the mean language of children with normal hearing (low average) but within the normal developmental continuum.”

“...intervention for LID (late-identified) children can keep language delays from increasing, but closing developmental delays at the time of diagnosis of hearing loss is much harder, for it would require children to make language gains greater than the development of typically developing hearing children.”

Christine Yoshinaga-Itano, Ph.D

Journal of Deaf Studies and Deaf Education 8:1
Winter 2003

One Family's Story

The work you do makes a tremendous difference in the life of the child with hearing loss and their family. The following story of one family's experience with UNHS shows the impact of early identification and treatment.

Unimpaired Services For Impaired Hearing

I think most parents experience grief, despair, and disappointment upon learning that their child has a disability. My feelings were certainly no exception to this. When my daughter Kristine was born nine years ago, I vividly recall the devastation and fear that I experienced as she failed her newborn hearing screening exam.

These feelings continued through the following weeks as Kristine failed repeated ABR and OAE testing. My reaction was most likely worsened by the fact that I had not yet come to terms with my own hearing loss. Finally our path of referrals led us to what I believed at the time was good news. We were sent to an ENT doctor who assured us that there was merely fluid in Kristine's ears, and that surgery and tubes would restore her hearing to normal. This was what I wanted to hear! My daughter was fine, and I was not responsible for passing on a genetic defect.

Kristine had surgery for ear tubes at three months of age. At her follow-up appointment after surgery, we were told that the fluid had been drained, and that Kristine was now hearing at normal levels. Since Kristine was responding to the doctor's voice, and could hear him open and shut the door, additional testing was not needed, and requests for additional ABR and OAE testing were declined.

All worries were set aside for about two years. Kristine seemed to be doing fine, and our second daughter, Charlotte, passed her newborn hearing screening with no problems. Not long after this, our daycare provider noticed that Kristine wasn't responding to her name when called. Because we were new parents, enamored and in love with our girls, we were unaware of the delays Kristine was experiencing in her speech and language development. Our physician referred us back to the same ENT doctor who informed us that a new set of tubes was all that was needed.

Following the second surgery, however, things just didn't seem right. The doctor told me that her sudden change of behavior (agitation and frustration in addition to nightmares) were not a result of his surgery, but were in my head or due to some other inexplicable cause. Fortunately, at this point, I realized I needed to search elsewhere for help.

Through a friend who has a daughter who is deaf, I was given a referral for a private pediatric audiologist. Kristine was diagnosed with binaural moderate to severe sensory-neural hearing loss. We immediately had her fitted for hearing aids and were finally given the proper referral for early intervention services that ideally would have followed us from the hospital at birth. By this time Kristine was 2 ½ years old. Giving her hearing aids was like giving her a whole new world. It seemed almost instantly that communication improved, as did her speech and language development.

We received six months of in-home early intervention. Many of those first visits were spent with our specialist listening to me cry and sort through many troubled feelings. This was just as important to me as helping me to learn how to help Kristine adjust to her hearing aids or work on her speech and language development. Our Parent/Infant program advisor became an instant part of our family as she worked with us. Kristine looked forward to her visits, and was always enthralled and engaged with the wonderful lessons our advisor had so carefully prepared. She put us in contact with other parents and families, informed us about issues of deafness and hearing loss, and provided us with coping strategies. She also provided us with medical, professional, and educational resources. Additionally, she helped prepare us for the transition to preschool by informing us of the different methodologies and educational options available. We were given tours of possible schools, as well as meetings with their program directors.

Kristine was getting good benefit from her hearing aids, and was making progress with her speech and language. We chose to pursue auditory-verbal instruction and she began preschool at age three. This instruction took place in a small self-contained classroom with about six other children who were deaf and hard of hearing. All students were fitted with hearing aids or a cochlear implant. Kristine was thrilled with her new friends, and her wonderful new teacher. Class was held daily, with all lessons and activities built on the premise of developing auditory speech and language. Parents were also given a weekly session with the teacher. During this time, we worked individually with our child and received instruction on how to work with our child at home to reinforce what was being taught at school.

Kindergarten and first grade were taught in inclusive classrooms. Kristine enjoyed the benefit of a teacher of the deaf and a regular education teacher. We appreciated the efforts and benefits of both teachers and the opportunity it provided our daughter to attend school in a regular education setting, while still receiving the much needed services and instruction of teachers of the deaf. FM systems were used for the benefit of all in the classroom. Kristine's teachers were wonderful; preparing skillful, well-planned lessons that built a solid foundation for Kristine's education. Classroom instruction continued to include focus on speech and language development, while covering grade-level curriculum.

Kristine began 2nd grade mainstreamed in Howard County. This was a huge move for us geographically (from Salt Lake City, Utah), and educationally (leaving Utah School for the Deaf). All fears subsided as we met with our new principal. She listened to our needs and concerns, and was very instrumental in assisting us to make a successful transition. She selected a teacher who was perfect for Kristine in every way- from teaching style to classroom location. Our principal coordinated a team meeting for the first day of school including the school psychologist, guidance counselor, reading specialist, speech/language pathologist, and audiologist- each of whom has played such an important role. We have received amazing support from administration, teachers, and professionals in Howard County and, as a result, Kristine is happily completing 3rd grade. Her teachers this year are equally as wonderful. She receives great benefit from her FM system and uses it in most classroom settings, including art and media. We are working on improving reading comprehension and speech clarity, but overall Kristine is performing academically on grade level, and loving every minute of her educational experience. Additionally she studies dance, piano, and violin.

I directly attribute Kristine's success to early detection and intervention that we have been so fortunate to receive. I gratefully acknowledge the medical professionals who work so hard to implement newborn hearing screening. Thank you to the many audiologists, Speech/language pathologists and other specialists, teachers, administrators and service providers whose work and efforts have truly blessed our lives. Please know how much each of you are valued and appreciated, and the direct impact you have on the children and families with whom you work. Each has their own unique story and circumstance, and parents who need your understanding, support, and expertise. Your work has helped our lives more than you can know.

Shari K.



Maryland Universal Newborn Hearing Protocols

Early Identification and Intervention is the Key

Maryland's Universal Newborn Hearing Screening Advisory Council have developed protocols for newborn hearing screening and diagnostic evaluation which are available on our website:

http://fha.state.md.us/genetics/pdf/UNHS_protocol_FINAL04SEPT06.pdf

The protocols support the recommendations of the Joint Committee on Infant Hearing (2000) and the American Academy of Pediatrics endorsement of the “1-3-6” process which outlines the timeline of identification and intervention:

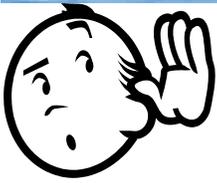
All newborns will be screened for hearing loss before **1 month of age** and preferably before hospital discharge.

Diagnostic audiologic assessment for infants who screen positive will take place before **3 months of age**.

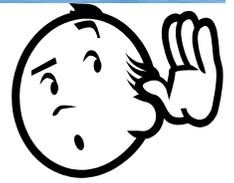
All infants identified by diagnostic assessment will receive intervention services- audiologic, medical and early intervention- before **6 months of age**.

Just in time...1-3-6





Announcements



Maryland Infant Hearing
Second Annual Meeting

“Identification to Intervention~How it all comes together”

Friday, June 22, 2007 10:00 a.m. – 2:30 p.m.

Hearing and Speech Agency

5900 Metro Drive Baltimore, MD 21215

This year’s speakers will include:

Shari Knudson, parent

Cheri Dowling, Director of Advocacy, American Society for Deaf Children;
Parent Coordinator, Family Support and Resource Center, Maryland School
for the Deaf

Maryann Swann, Director, Family Education Early Intervention,
Maryland School for the Deaf

Paul Farrell, M.S., CCC-A, Director, Hearing Aid Loan Bank Program,
Maryland Infant and Toddlers Program, Maryland State Department of Edu-
cation

Jill Chinnici, M.A., CCC-A, Coordinator, Cochlear Implant Program,
The Listening Center at Johns Hopkins Medicine

Lunch will be provided for all registrants

Registration is free, but you must register by June 11, 2007. Please fill out the following form
and attach it in an email to EFilippone@dhhm.state.md.us or fax to 410-333-5047

INFANT HEARING MEETING
Friday, June 22, 2007
10:00 a.m. – 2:30 p.m.
Hearing and Speech Agency
5900 Metro Drive Baltimore, MD 21215

REGISTRATION

Name _____

Business Name _____

Business Address _____

Tel _____ Fax _____

Email _____

Special Accomodations required _____

Return this form to Erin Filippone by June 11, 2007

Fax: 410-333-5047

Email: *EFilippone@dhhm.state.md.us*

Resources

We have a number of resources available to assist you on our website:

http://fha.state.md.us/genetics/html/inf_hrg.cfm

Here you will find:

Infant Hearing Newsletters – past and current editions

Informational pamphlets and brochures – some available in Spanish

Patient education forms

Level 2 and 3 screening forms

Guidelines and Checklists

Links to other helpful sites

Please also note our toll free phone number 800-633-1316 and our toll free TTY number 866-635-4410.

As always, the staff at Maryland DHMH would be happy to assist you in any way we can. We can be reached by phone:

Linda Vaughan, Program Director 410-767-6432

Erin Filippone, Program Audiologist 410-767-6762

Theresa Thompson, Follow-up Coordinator 410-767-5093

Stephanie Hood, Follow-up Coordinator 410-767-6659

Or by mail: Universal Newborn Hearing Screening Program

Maryland Department of Health and Mental Hygiene

201 W. Preston Street, Room 423A

Baltimore, MD 21201

Fax: 410-333-5047

This newsletter is 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@dnhm.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.