

WHAT YOU DON'T KNOW CAN HURT YOU

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"If I had only known sooner" are words many families in Texas will not have to say. Efforts to promote Early Hearing Detection and Intervention (EHDI) are being made throughout the country. In 1994, the average age of identification of hearing loss in the nation was 24 months. In Texas, for children with Medicaid insurance, the average age of identification was 54 months.

To address this alarming statistic, in 1995 the Texas Department of Health initiated the Sounds of Texas (SOT) project to assist Texas hospitals with the implementation of Early Hearing Detection and Intervention programs. The motto of the sounds of Texas is "Detect and Connect One Baby at a Time." To accomplish the goal of detecting and connecting, the SOT team contacts hospitals, physicians, and families in an effort to raise awareness of the importance of early detection and intervention.

The research by Dr. Christine Yoshinaga-Itano clearly suggests that "identification of hearing loss by six months of age, followed by intervention, is the most effective strategy for the normal development of language in deaf and hard-of-hearing infants and toddlers." Children who are late identified (after 6 months but before 30 months) have language development that is one standard deviation below the average of children identified before 6 months of age.

The challenges associated with identification and connecting infants within this critical time frame include the following: 1) implementation of well-designed programs, 2) physician support, and 3) family involvement. The detection/connection process requires support from all key participants to ensure that the baby's hearing needs are met.

WHAT DO WELL-DESIGNED PROGRAMS LOOK LIKE?

Support from hospital administrators, program managers and a sense of "ownership" on the part of the screening staff is critical to the success of any hearing screening program. Hospital administrators are program advocates when they recognize that early identification of hearing loss and intervention is beneficial for their babies. Hospital administrators decide whether infant hearing screening programs will be implemented and continued year after year. They provide ongoing financial support and assist in increasing community awareness regarding the importance of early identification and intervention.

Program managers are individuals who provide program stability. This person may be an RN or an audiologist who performs tasks on a regular basis to ensure that the infant hearing screening program runs smoothly and efficiently. Some of the tasks include: 1) hiring of personnel, 2) scheduling of program coverage and accountability, 3) ordering supplies, 4) evaluating employee performance, 5) follow-up rescreening, and 6) calculating program statistics.

Some program managers do all of the tasks listed above, some do a few and some do too few, thus determining the quality and successful outcome of the infant hearing screening program.

Personnel conducting the screening are the individuals who manage the infant hearing screening program on a daily basis. The screeners' expertise is varied to include nurses, unit assistants, EEG technicians, audiologists, and respiratory therapists. The screeners' primary responsibilities include: 1) screening all babies prior to discharge, 2) tracing and follow-up re-screens, and 3) calculating program statistics. The infant hearing screeners who demonstrate "ownership" for their program have come to be called "Hearing Heroes."

WHAT IS THE ROLE OF THE PHYSICIAN?

The role and advocacy on behalf of the pediatrician and neonatologist are vital for the "detect and connect" process to successfully take place. The role of the physician can be to encourage families to keep important follow-up appointments. Physicians can be assured that the hearing needs of patients are met by considering the following:

1. Is the hospital in your area screening ALL newborns?
2. Do they receive accurate hearing screening results?
3. Do babies who have a "fail" result get connected to services in a timely manner?

WHAT IS THE ROLE OF THE PARENT?

Parents/caregivers recognize that they are their child's primary advocate. Their role is to make informed and timely decisions regarding their baby's hearing. The following list is provided to assist parents in gaining understanding of how their baby's hearing needs can best be served.

- **Why is hearing so important?** Babies learn to talk by hearing you talk to them. This learning doesn't begin at 12 months or even 6 months, but at birth! If undetected, hearing loss can lead to speech, language, emotional, and social problems.
- **Who can develop hearing loss?** Infants who have needed intensive care are at a higher risk for developing hearing loss; one in 50 from neonatal intensive care has a hearing loss. Other infants are born with hearing loss with no risk factors. That is why in 1994, the Joint Committee on Infant Hearing recommended that all babies be tested "preferably before they leave the hospital."
- **Why is the test important?** Early identification of hearing loss is critical for normal speech and language development of a child.
- **How can you test a baby's hearing?** They can't tell you if they hear! Actually, they can tell us! Just not the way we usually think. Any child, even a newborn infant can receive an

accurate hearing test. Two physiological tests are used to assess hearing - Auditory Brainstem Responses and Otoacoustic Emissions.

- **Will this hurt my baby?** Absolutely not. The test is painless and is conducted while your baby is sleeping or resting quietly.
- **What if my baby is not born at a hospital that does hearing screenings?** Ask your baby's doctor where you can schedule this very important screening.
- **What happens if my baby passes the screening?** No further testing will be required unless requested by your physician. Information about normal speech, language, and auditory development is included in this article. If you should have any concerns as your baby gets older, you should talk with your baby's doctor or an audiologist in your area.
- **What happens if my baby does not pass the hearing screening?** This does not mean that your baby cannot hear. Further testing will be scheduled to rule out significant hearing impairment. Not all babies who need further testing have hearing loss.
- **What can be done if my baby has a hearing loss?** By detecting hearing loss during the newborn period, treatment can be initiated immediately. An individualized plan will be designed following a complete evaluation by an audiologist and other professionals with attention to family preferences. Most children with hearing loss have remaining hearing that can be valuable in learning language.

WATCH FOR THESE STEPS IN COMMUNICATION

0-4 Months

- Startles (jumps) to loud sounds
- Can be soothed by a familiar voice
- Watches speaker's face when spoken to
- Makes "aah" or "cooing" sounds

5-9 Months

- Turns head to interesting sounds
- Responds to quiet talking, other soft sounds
- Will awaken to a loud noise
- Enjoys rattles and other sound-making toys
- Begins to understand "bye-bye" with hand motions
- Will stop - at least for a moment - when you say "no-no"
- Looks to mom or dad correctly when "mommy" or "daddy" is spoken
- Will make noises when alone
- Babbles using a long string of sounds

10-14 Months

- Turns head in any direction
- Responds to name when spoken quietly
- Can point and look at familiar people or objects when asked
- Uses voice to get your attention
- Begins to say simple words: "mama," or "bye"
- Imitates words that you say
- Jabbers and acts like they are "talking"
- Uses consonant sounds
- Enjoys music; may try to dance or make sounds to music

15-23 Months

- Follows simple directions
- Recognizes body parts when asked
- Uses words of more than one syllable

24 Months Plus

- Understands most of what is said
- Enjoys being read to
- Says two word sentences - "more cookies"
- Uses more than 50 words correctly

DON'T WAIT

In the United States, the delay between the time a baby's hearing loss is suspected by the parents and confirmed by a formal hearing test is often 12 months. At the first suspicion of hearing loss in a newborn, infant, or young child, ask your baby's doctor or an audiologist for advice. Making sure your concerns are heard will keep you from having to say "*If I had only known sooner.*"

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