The Importance of Early Hearing Screening

Hearing is essential for normal development of speech and language. Finding babies with hearing loss early and offering education, family support, and intervention before they fall behind in language development can make a big difference.

Some children with hearing loss may startle to loud sounds and even seem to listen, making it difficult to recognize hearing loss without testing or screening.

Hearing screening is best done in the first month of life when the baby can easily sleep through the screening process.

What is the Midwife's Role?

In a home birth situation, the midwife has two options for newborn hearing screening:

1. Perform the screening during the 24-hour well baby visit. Equipment is portable and easy to use.
2. Refer the baby to an outpatient provider who performs newborn hearing screening.

Regardless of which option is chosen, the midwife plays an important role in communicating the importance of the newborn hearing screen to the baby's family. The TEHDI program has educational brochures available at no cost.
Where Can Baby's Hearing Be Screened?

You can find the equipment and trained personnel who can perform newborn hearing screening in a variety of settings, including hospital nurseries, audiology offices, birth centers, primary care clinics, public health departments, and school districts. The TEHDI program can help you find an outpatient provider in your area.

How Is Newborn Hearing Screening Done?

Newborn hearing screening does not require the infant's participation. Unlike the hearing tests done with older children and adults, babies do not have to raise their hands in response to a beep. While the baby is asleep, computerized equipment measures responses to a series of tones and evaluates the baby's hearing. The testing is simplified so that a variety of individuals with different training can effectively screen babies. The testing is not painful or even uncomfortable.

Two different technologies are currently used for newborn hearing screening: Otoacoustic Emissions, or OAE, and Automated Auditory Brainstem Response, or AABR.

With OAE, the test administrator inserts a small probe into the baby’s ears. The probe looks like earbuds often used to listen to music. Soft tones are played through the speakers in the probe, and the probe then measures the tones as they bounce back from the different parts of the infant's ear. The computer attached to the small probes measures the results and concludes with a Pass or a Refer result.

With AABR, sounds are played to the baby through earphones attached to the baby’s head. Small sensors taped to the baby’s skin measure the baby’s physiologic response to the tones. As in OAE, the attached computer measures the results and concludes with a Pass or Refer result.

Are There Any Risk Factors for Hearing Loss?

Risk factors have been identified that indicate which children are at an increased risk for hearing loss. If a baby has any of these risk factors at birth or in childhood, it is especially important to schedule a hearing test.

Risk Factors for Hearing Loss that Require Further Testing:

- Parental concern that a child cannot hear well.
- Family history of permanent childhood hearing loss.
- Transfer to Neonatal ICU for more than 5 days.
- Multiple ear infections.
- Birth defects.
- Birth asphyxia.

For more information about Newborn Hearing Screening and to order free educational materials, call 1-800-252-8023, ext. 7726
Email: audiology@dshs.state.tx.us
Website: www.dshs.state.tx.us/tehdi
#05-13597 Revised 03/12