

INFANT AUDIOLOGIC ASSESSMENT

NEBRASKA EARLY HEARING DETECTION AND INTERVENTION (EHDI) PROGRAM ADVISORY COMMITTEE RECOMMENDATIONS

Early detection and assessment of hearing loss are the keys to successful habilitation of infants and toddlers. Since universal newborn hearing screening was established in Nebraska since December 2003, approximately 1,200 infants need additional follow-up services each year. Infants are candidates for audiologic assessment when they have not passed an initial hearing screening in the birthing facility and an outpatient re-screening soon after discharge from the birthing facility. By no later than 3 months of age hearing status should be confirmed and hearing loss quantified. The infant audiologic assessment recommendations (detailed below) are for infants under 6 months of age.

Successful infant audiologic assessment requires the audiologist to have skills and knowledge to fulfill the roles of diagnostician, counselor, and audiologic case coordinator. The audiologist should conduct a battery of tests that includes a case history, documentation of risk indicators for hearing loss, otoscopic inspection, evoked otoacoustic emissions (OAE) assessment, auditory brainstem response (ABR) assessment, and middle ear measures.

The approach to services should be family-centered by promoting family and professional partnerships, responding to needs, building on strengths and respecting the diversity of families.

The Advisory Committee strongly recommends that any audiologist accepting infants younger than 6 months of age for audiologic assessment should have the ability to complete the following procedures:

- **Auditory Brainstem Response (ABR)**

- ABR threshold to frequency-specific stimuli for air and bone conduction.

- ABR suprathreshold to click stimuli with varied rate and polarity.

- **Otoacoustic Emissions (OAE)**

- Transient-evoked (TEOAE) or distortion product (DPOAE) equipment capable of a variety of test parameters.

- **Acoustic Immittance**

- Tympanometry using probe tones greater than 226 Hz

- Acoustic reflex threshold

- **Behavioral**

- Behavioral audiometric test procedures that are developmentally appropriate.

** An otologic evaluation is also part of the assessment process but it may occur at a different facility and time.*

The audiologist should discuss the results with the family and report the audiologic assessment results to the infant's primary health care provider and the Nebraska Early Hearing Detection and Intervention Program. Referrals and recommendations should be made consistent with the Joint Committee on Infant Hearing's 2007 Position Statement. If a permanent hearing loss is identified, families should be given the Nebraska Early Hearing Detection and Intervention Program's Parent Resource Guide.

References: American Speech-Language-Hearing Association. (2004). *Guidelines for the Audiologic Assessment of Children from Birth to 5 Years of Age* [Guidelines]. www.asha.org/members/deskref-journals/deskref/default

American Speech-Language-Hearing Association. (2006). *Roles, knowledge, and skills: Audiologists providing clinical services to infants and young children birth to 5 years of age* [Knowledge and skills]. www.asha.org/reference

Joint Committee on Infant Hearing. (2007). *Year 2007 position statement: Principles and guidelines for early hearing detection and intervention*. Available from www.asha.org/policy.

American Speech-Language-Hearing Association. (2008). *Guidelines for Audiologists Providing Informational and Adjustment Counseling to Families of Infants and Young Children With Hearing Loss Birth to 5 Years of Age* [Guidelines]. Available from www.asha.org/policy.

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