

UNC Newborn Critical Care Center (NCCC) Clinical Guidelines

Guidelines for Hearing Screening

PURPOSE

To detect congenital or acquired, unilateral or bilateral, of any degree from minimal to profound and of any type, including conductive, sensory (sensorineural), auditory neuropathy, and mixed hearing conditioned, whether permanent, transient, or intermittent for all infants admitted to the UNC NCCC. Early intervention can significantly improve language outcomes and educational achievement in affected infants.

TEST METHOD

All screenings in the NCCC will be completed using Automated Auditory Brainstem Response (AABR) equipment. Infants who are unable to be screened using AABR technology will be screened using DPOAE (Distortion Product Otoacoustic Emissions) technology.

HEARING SCREENING SHOULD BE COMPLETED:

- As close to discharge as possible
- On room air unless child will need home oxygen
- No earlier than 34 weeks gestation
- Following completion of phototherapy
- Following completion of ototoxic medications

DEFERRING HEARING SCREENING

- *Transfer to another hospital* – the hearing screen may be deferred however the need for the hearing screen must be indicated on the discharge summary with the recommendation that the receiving institution screen the infant at the time of discharge.
- *Transfer to another unit within the UNC Children's Hospital* – the hearing screen may be deferred however the need for the hearing screen to be completed should be discussed with the transfer service.

RESCREENING AFTER INITIAL FAILED SCREENING

Both ears will be rescreened following a unilateral or bilateral fail result on initial hearing screen. No more than 2 hearing screens will be completed on any infant. A fail result on the second screen necessitates a recommendation for a diagnostic evaluation. The family or caregivers will be contacted by the UNC Pediatric Audiology clinic to schedule the diagnostic ABR evaluation. The discharging provider must assure that there is an audiology referral in place to the outpatient evaluation.

SCREENING HOSPITAL READMISSIONS

All babies \leq 1 month of age who are readmitted to the NCCC for conditions associated with potential hearing loss will have a repeat hearing screening prior to discharge.

DOCUMENTATION OF SCREENING RESULTS

The audiologist will enter screening results into the patient's medical record within the Newborn Hearing Screening tab in Flowsheets. ***A progress note will also be completed by the audiologist documenting results along with specific follow-up recommendations that are based upon the screen results and identified risk indicators for each infant.***

RECOMMENDATIONS FOR BABIES WHO PASS INITIAL SCREENING

A chart review will be completed by the pediatric audiologist on every infant screened in the NCCC. Follow-up recommendations are made based upon risk indicators associated with permanent congenital, delayed-onset or progressive hearing loss in childhood. ***Follow-up recommendations should be placed in the discharge summary so results are accessible to the pediatrician.***

NCCC SCHEDULE FOR AUDIOLOGISTS

Hearing screens are routinely performed by the audiologists on Monday, Wednesday and Friday. If a hearing screen is needed on a non-screening day during the week, the nurse should send a request via page, epic chat, or in basket message to one of the audiologists. If one is needed on the weekend, the well-baby nursery should be contacted to complete the screening.

Audiologists:

Laurel Zdanski, AuD (NICU Liaison)

Marisa Temple AuD

Shannon Culbertson AuD

Coverage	Name	Pager	Phone
<i>Monday</i>	Dr. Laurel Zdanski	123.2991	984.974.3658
<i>Wednesday</i>	Dr. Marisa Temple	216.4902	984.974.2547
<i>Friday</i>	Dr. Shannon Culbertson	347-2707	984.215.4456

References:

Joint Committee on Infant Hearing. (2019). Journal of Early Hearing Detection and Intervention, 4(2), 1-44.

Joint Committee on Infant Hearing. (2007). [Year 2007 Position Statement: Principles and guidelines for early hearing detection and intervention programs](#). Pediatrics, 20 (4): 898-921.

Vohr, Betty R. (2020). Screening for hearing loss. *UpToDate*, Retrieved February 8, 2018 from <https://www.uptodate.com/screening-the-newborn-for-hearing-loss>

Allen D. Buz Harlor, Charles Bower. (2009). [Hearing Assessment in Infants and Children: Recommendations Beyond Neonatal Screening](#). Pediatrics, 124 (4): 1252-1263

Reviewed December 2023 – Hubbard NNP / Miedema NNP / Lynch MD / Zdanski Au.D.