

IV. UNHSA Infant Audiological Assessment Guidelines

INTRODUCTION

Infants are candidates for audiologic assessment whenever they have not completed their newborn hearing screening with a bilateral Pass and/or if referred by a primary care professional due to the presence of risk factors for hearing loss (see Appendix J for a listing of 14 of these risk factors identified by the Joint Committee on Infant Hearing in 2007)

The primary purpose of an audiologic assessment is the determination of hearing loss. When a hearing loss is confirmed, a description of the severity, type, and configuration will assist in the subsequent medical diagnosis, the determination of etiology, and recommendations for intervention. It is, of course, important to establish that hearing is normal if that is the case.

B. PROTOCOL FOR INFANT AUDIOLOGICAL ASSESSMENT

The following protocol was developed to facilitate the identification of hearing loss, medical clearance (a statement from a physician specializing in disorders and diseases of the ear indicating that a particular hearing loss is not medically treatable and that amplification devices will not harm the patient's ears and may be fit) for amplification (the use of hearing aids and other electronic devices to increase loudness of a sound so that it may be more easily received and understood), and use of amplification for infants with hearing loss by 3 months of age.

- A licensed audiologist who has experience assessing hearing in infants should implement the diagnostic protocol.
- The licensed audiologist should have the test equipment necessary to complete the described evaluation procedures.
- Infants should obtain a diagnostic assessment after an abnormal newborn two-step hearing screening, if the parents suspect a hearing loss, or when recommended by a physician due to the baby falling into a high risk category.
- Audiologic assessment should occur within 90 days of birth.

STEP 1: Initial Audiologic Assessment:

- a. Perform Otoscopic Evaluation
- b. Auditory Brainstem Response (ABR):
 - i. Obtain a 70 or 75 dB nHL response to click stimulus to assess latency and morphology of waves I, III, and V and interwave latency for waves I-III, III-V, and I-V.
 - ii. Obtain a 30 or 35 dB nHL response to click stimulus to assess latency and morphology of wave V.
- c. Evoked Otoacoustic Emissions (OAEs):

- e. Perform behavioral observation audiometry (BOA) to a speech stimulus and/or a 500 and 2000 Hz tone or noise, by air conduction and bone conduction. Identify any minimal responses and attempt to obtain startle responses
- f. Discuss the results and follow-up recommendations with the parents.
- g. Prepare a written report interpreting test results and describing the diagnostic profile.
- h. If hearing loss is confirmed, notify the primary care physician/medical home in writing, recommending referral to an otolaryngologist for evaluation and to obtain an otologic diagnosis and medical clearance for amplification.
- i. Complete an audiology assessment report and disseminate appropriately. **If the baby was born in Montana and referred for audiological assessment because of “refer” results from completed newborn hearing screening, enter the results of the audiological assessment in the state’s required reporting software and submit as directed.**
- j. **IF HEARING LOSS IS CONFIRMED, EXPLAIN THE CONSENT FOR RELEASE OF INFORMATION (APPENDIX I) TO THE PARENTS.** The consent form must be signed by the parents before information is released to Part C agencies or MSDB. In addition to the outreach services MSDB can provide to families and their deaf babies, the school is required by state law to track the interventions provided to deaf and/or blind children in Montana.
Please do not allow the parents to leave your office without reading, completing, and signing the consent form.

STEP III: The following should be completed by three months of age for infants with confirmed hearing loss:

- a. Review results of the diagnostic audiologic assessment, implications of the audiologic diagnosis, and recommendations for intervention with the parents including:
 - i. Amplification options.
 - ii. Information regarding the importance of early intervention.
 - iii. Information regarding the need for medical follow-up.
 - iv. The availability and importance of parent-to parent support.
 - v. Information and referral for funding assistance, if necessary.
- b. Initiate the amplification fitting process, if appropriate, after medical clearance for amplification has been obtained
- c. Discuss additional specialty evaluations (e.g., genetics, ophthalmology, and child development) with the parents and the infant's primary care physicians as appropriate.
- d. **With completion of the consent form, inform** the Montana Department of Public Health and Human Services Universal Newborn Hearing Screening and Assessment Monitoring program and Part C early intervention services in the infant's community within 48 hours,

per Part C requirements, to obtain specific information regarding intervention options and resources.

- e. Complete an audiology assessment report and disseminate appropriately. **State law now requires that if the baby was born in Montana and referred for audiological assessment because of “refer” results from newborn hearing screening, enter the results of the audiological assessment in the state’s required reporting software and submit as directed.** Following discussion with audiologists, the state program has requested that audiologists also use the state’s reporting software for all children who have a hearing loss whether born in Montana or not AND for all children who have passed newborn hearing screening and have developed delayed onset or progressive hearing loss. This reporting will greatly assist in providing electronic referrals to the Montana School for the Deaf and Blind, which by state law is required to track interventions for all children in Montana who are deaf and/or blind. Remember that the parental consent form is required for these referrals as well.

C. **AUDIOLOGIST REPORTING RESPONSIBILITIES TO STATE PROGRAM**

Each licensed audiologist to whom an infant is referred for audiological assessment following completion of newborn hearing screening is to file a report at least monthly with the Universal Newborn Hearing Screening and Assessment Monitoring Program with the Department of Public Health and Human Services. State law requires reporting by the 15th of the month following the month in which the infant was assessed. (Most audiologists who perform pediatric audiological assessments in Montana have chosen to report their assessments as soon as possible to facilitate intervention.)

- The data reporting requirements are:
 - the newborn’s full name, date of birth, gender, mother’s maiden name, and the location of the baby’s birth (e.g., name of birth hospital or birthing center, home birth)
 - complete audiological assessment results, including current hearing status (e.g., bilateral profound sensorineural hearing loss; moderate conductive hearing loss in the right ear/normal hearing in left ear; etc.)
- The HI*TRACK reporting software is provided to each participating audiologist to allow the reporting requirements to be met. The state program pays the license costs for the software. A toll-free Help Desk supports the use of the software Monday through Friday from 8:00 am to 5:00 pm Mountain Time. The software is heavily encrypted and is secure and downloads of assessment data can be safely transmitted to the state program by e-mail.
- Each audiologist is to request written authorization from the infant’s parent or guardian for the audiologist to provide the infant’s identifying information and test results to the state program for subsequent referral for tracking and intervention services by the Montana School for the Deaf and Blind, and Part C of IDEA services.