

CHAPTER 3  
EARLY HEARING DETECTION AND INTERVENTION

**641—3.1(80GA,ch102) Definitions.** For the purposes of this chapter, the following definitions will apply:

“*Area education agency*” or “*AEA*” means an intermediate educational unit created by Iowa Code chapter 273.

“*Audiologist*” means a person licensed pursuant to Iowa Code chapter 147 or certified by the Iowa board of educational examiners pursuant to 282—15.3(272) or a person appropriately licensed in the state where the person practices.

“*Birth center*” means “*birth center*” as defined in Iowa Code section 135.61.

“*Birthing hospital*” means a private or public hospital licensed pursuant to Iowa Code chapter 135B that has a licensed obstetric unit or is licensed to provide obstetric services.

“*Department*” means the Iowa department of public health.

“*Diagnostic audiologic assessment*” means physiologic or behavioral procedures completed by an audiologist to evaluate and diagnose hearing loss.

“*Discharge*” means a release from a hospital to the parent or legal guardian of the child.

“*Early ACCESS*” means Iowa’s Individuals with Disabilities Education Act (IDEA), Part C, program for infants and toddlers. It is a statewide, comprehensive, interagency system of integrated early intervention services that supports eligible children and their families as defined in 281—Chapter 120.

“*Guardian*” means a person who is not the parent of a minor child, but who has legal authority to make decisions regarding life or program issues for the child. A guardian may be a court or a juvenile court. “Guardian” does not mean conservator, as defined in Iowa Code section 633.3, although a person who is appointed to be a guardian may also be appointed to be a conservator.

“*Hearing loss*” means a permanent unilateral or bilateral hearing loss of greater than 30 dB HL in the frequency region important for speech recognition (500-4000 Hz).

“*Hearing screening*” means a physiological measurement of hearing of a newborn or infant with a “pass” or “refer” result. Screening is used to determine the newborn’s or infant’s need for further testing and must be performed bilaterally, when applicable.

“*Initial screening*” means a newborn hearing screening performed during the birth admission for an infant born in a birthing hospital, or the first newborn hearing screening performed on a newborn born in a facility other than a hospital.

“*Newborn hearing screening*” means a physiological test to separate those newborns with normal hearing from those newborns who may have hearing thresholds of greater than 30 dB HL in either ear in the frequency region important for speech recognition (500-4000 Hz).

“*Normal hearing*” means hearing thresholds in both ears of 30 dB HL or less in the frequency region important for speech recognition (500-4000 Hz).

“*Parent*” means:

1. A biological or adoptive parent of a child;
2. A guardian, but not the state if the child is a ward of the state;
3. A person acting in the place of a parent, such as a grandparent or stepparent with whom a child lives, or a person who is legally responsible for the child’s welfare;
4. A surrogate parent who has been assigned in accordance with 281—120.68(34CFR303); or
5. A foster parent, if:
  - A biological parent’s authority to make the decisions required of parents under state law has been terminated; and
  - The foster parent has an ongoing, long-term parental relationship with the child; is willing to make the decisions required of a parent; and has no interest that would conflict with the interests of the child.

*“Physician”* means an individual licensed under Iowa Code chapter 148, 150, or 150A.

*“Rescreen”* means a newborn hearing screening performed after two weeks of age on an infant who did not pass the initial screening.

**641—3.2(80GA,ch102) Purpose.** The overall purpose of this chapter is to establish administrative rules in accordance with 2003 Iowa Acts, chapter 102, relative to the following:

1. Universal hearing screening of all newborns and infants in Iowa.
2. Facilitating the transfer of data to the department to enhance the capacity of agencies and practitioners to provide services to children and their families.

**641—3.3(80GA,ch102) Goal and outcomes.** The goal of universal hearing screening of all newborns and infants in Iowa is early detection of hearing loss to allow children and their families the earliest possible opportunity to obtain appropriate early intervention services.

**641—3.4(80GA,ch102) Screening the hearing of all newborns.** Beginning January 1, 2004, all newborns and infants born in Iowa, except those born with a condition that is incompatible with life, shall be screened for hearing loss. The person required to perform the screening shall use at least one of the following procedures:

1. Automated or screening auditory brainstem response, or
2. Evoked otoacoustic emissions.

**641—3.5(80GA,ch102) Procedures required of birthing hospitals.** Beginning January 1, 2004, each birthing hospital in Iowa shall follow these procedures:

**3.5(1)** Each birthing hospital shall designate an employee of the hospital to be responsible for the newborn hearing screening program in that institution.

**3.5(2)** Prior to the discharge of the newborn, each birthing hospital shall provide hearing screening to every newborn delivered in the hospital, except in the following circumstances:

- a.* The newborn is transferred for acute care prior to completion of the hearing screening.
- b.* The newborn is born with a condition that is incompatible with life.

**3.5(3)** If a newborn is transferred for acute care, the birthing hospital shall notify the receiving facility of the status of the hearing screening. The receiving facility shall then be responsible for completion of the newborn hearing screening prior to discharge of the newborn from the nursery.

**3.5(4)** Newborn hearing screening shall be performed by an audiologist, audiology assistant, audiometrist, registered nurse, licensed physician, or other person for whom newborn hearing screening is within the person’s scope of practice.

**3.5(5)** The hospital shall report newborn hearing screening results to the parent or guardian in written form.

**3.5(6)** The hospital shall report newborn hearing screening results to the department in a manner prescribed in 3.8(80GA,ch102).

**641—3.6(80GA,ch102) Procedures required of birth centers.** Beginning January 1, 2004, each birth center in Iowa shall follow these procedures:

**3.6(1)** Each birth center shall designate an employee of the birth center to be responsible for the newborn hearing screening program in that institution.

**3.6(2)** Prior to the discharge of the newborn, each birth center shall refer every newborn delivered in the birth center to an audiologist, physician, or hospital for a newborn hearing screening. Before discharge of the newborn, the birth center shall arrange an appointment for the newborn hearing screening and report to the parent the appointment time, date, and location.

**3.6(3)** The facility to which the newborn is referred for screening shall complete the screening within 30 days of the newborn's discharge from the birth center, unless the parent fails to attend the appointment. If the parent fails to attend the appointment, the facility shall document such failure in the medical or educational record and shall report such failure to the department.

**3.6(4)** The person who completes the newborn hearing screening shall report screening results to the parent in written form.

**3.6(5)** The person who completes the newborn hearing screening shall report screening results to the department in the manner prescribed in 3.8(80GA,ch102).

**641—3.7(80GA,ch102) Procedures to ensure that children born in locations other than a birth center or birthing hospital receive a hearing screening.**

**3.7(1)** Beginning January 1, 2004, a physician or other health care professional who undertakes primary pediatric care of a newborn delivered in a location other than a birthing hospital or birth center shall refer the newborn to an audiologist, physician, or hospital for completion of the newborn hearing screening within three months of the newborn's birth. The health care professional who undertakes primary pediatric care of the newborn shall arrange an appointment for the newborn hearing screening and report to the parent the appointment time, date, and location.

**3.7(2)** The person who completes the newborn hearing screening shall report screening results to the parent in written form.

**3.7(3)** The person who completes the newborn hearing screening shall report screening results to the department in the manner prescribed in 3.8(80GA,ch102). If the parent fails to attend the appointment, the facility shall document such failure in the medical or educational record and shall report such failure to the department.

**641—3.8(80GA,ch102) Reporting hearing screening results and information to the department.**

Beginning January 1, 2004, any birthing hospital, birth center, physician, or other health care professional required to report information pursuant to 2003 Iowa Acts, chapter 102, shall report all of the following information to the department relating to each newborn's hearing screening within six days of the birth of the newborn, utilizing the department's designated reporting system.

**3.8(1)** The name and date of birth of the newborn.

**3.8(2)** The name, address, and telephone number, if available, of the mother of the newborn. If the mother is not the person designated as legally responsible for the child's care, the name, address, and telephone number of the parent, as defined in 3.1(80GA,ch102), shall be reported.

**3.8(3)** The name of the primary care provider for the newborn at the birthing hospital or birth center.

**3.8(4)** The results of the newborn hearing screening, either "pass," "refer," or "not screened," for each ear separately.

**3.8(5)** The results of any rescreening, either "pass" or "refer," and the diagnostic audiologic assessment procedures used for each ear separately.

**641—3.9(80GA,ch102) Conducting and reporting diagnostic audiologic assessments to the department.** Beginning January 1, 2004, any facility, including AEAs, conducting diagnostic audiologic assessments shall report the results of the assessments for any child under three years of age to the department. The facility shall conduct the assessment in accordance with the Pediatric Audiologic Diagnostic Protocol contained at Appendix A. Results shall be reported as follows:

**3.9(1)** Results shall be reported for each ear separately.

**3.9(2)** If an assessment results in a diagnosis of normal hearing for both ears, this shall be reported.

**3.9(3)** Any diagnosis of hearing loss shall also be reported except for transient conductive hearing loss lasting for less than 90 days in the professional judgment of the practitioner.

**3.9(4)** Reported results shall include a statement of the severity (mild, moderate, moderately severe, severe, profound, or undetermined) and type (sensorineural, conductive, mixed, or undetermined) of hearing loss.

**641—3.10(80GA,ch102) Sharing of information and confidentiality.** Reports, records, and other information collected by or provided to the department relating to a child's newborn hearing screening, rescreen, and diagnostic audiologic assessment are confidential records pursuant to Iowa Code section 22.7.

**3.10(1)** Personnel of the department shall maintain the confidentiality of all information and records used in the review and analysis of newborn hearing screenings, rescreens, and diagnostic audiologic assessments, including information which is confidential under Iowa Code chapter 22 or any other provisions of state law.

**3.10(2)** No individual or organization providing information to the department in accordance with this rule shall be deemed to be or held liable for divulging confidential information.

**3.10(3)** The department shall not release confidential information except to the following persons and entities under the following conditions:

a. The parent or guardian of an infant or child for whom the report is made.

b. A local birth-to-three coordinator with the Early ACCESS program or an agency under contract with the department to administer the children with special health care needs program.

c. A local health care provider.

d. A representative of a federal or state agency, to the extent that the information is necessary to perform a legally authorized function of that agency. The information provided may not include the personal identifiers of an infant or child.

**3.10(4)** Research purposes. All proposals for research using the department's data to be conducted by persons other than program staff shall first be submitted to and accepted by the researchers' institutional review board. Proposals shall then be reviewed and approved by the department before research can commence.

**641—3.11(80GA,ch102) Reporting requirements for AEAs.** Beginning January 1, 2004, any AEA providing newborn hearing screening, rescreen, or diagnostic audiologic assessment to an infant shall report all of the following information relating to each infant's screening, rescreen or assessment to the department utilizing the department's designated reporting system.

**3.11(1)** The name and date of birth of the infant.

**3.11(2)** The name, address, and telephone number, if available, of the mother of the infant. If the mother is not the person designated as legally responsible for the child's care, the name, address, and telephone number of the parent, as defined in 3.1(80GA,ch102), shall be reported.

**3.11(3)** The name of the primary care provider for the infant.

**3.11(4)** The results of any newborn hearing screening performed at the AEA, either “pass” or “refer,” for each ear separately.

**3.11(5)** The results of any rescreening performed at the AEA, either “pass” or “refer,” for each ear separately.

**3.11(6)** The results of any diagnostic assessment performed at the AEA, for each ear separately.

**641—3.12(80GA,ch102) Procedure to accommodate parental objection.** These rules shall not apply if the parent objects to the hearing screening.

**3.12(1)** If a parent objects to the screening, the birthing hospital, birth center, physician, or other health care professional shall obtain a written refusal from the parent or guardian and shall maintain the original copy of the written refusal in the newborn’s or infant’s medical record.

**3.12(2)** The birthing hospital, birth center, physician, or other health care professional shall send a copy of the written refusal to the department within six days of the birth of the newborn.

**641—3.13(80GA,ch102) Civil/criminal liability.** A person who acts in good faith in complying with these rules shall not be held civilly or criminally liable for reporting the information required.

These rules are intended to implement 2003 Iowa Acts, chapter 102.

[Filed emergency 11/17/03 after Notice 10/1/03—published 12/10/03, effective 1/1/04]

## **Appendix A**

### **Pediatric Audiologic Diagnostic Protocol**

The following protocol should be used to facilitate the diagnosis of hearing loss by three months of age and entry into early intervention for infants with hearing loss by six months of age. This diagnostic protocol should be implemented by an audiologist licensed by the Iowa board of speech pathology and audiology examiners or certified by the Iowa board of educational examiners.

Infants should be referred for a diagnostic evaluation after receiving a “refer” result from one or both ears on a newborn hearing screening and a hearing rescreen performed at two to six weeks of age. Timely referral for diagnostic auditory brainstem response (ABR) testing may negate the need for sedation for this test in very young infants. Infants who are identified at risk for late-onset hearing loss (JCIH, 2000) should receive audiologic monitoring and follow-up by age-appropriate test procedures at six-month intervals until the age of five years.

#### **Audiologic diagnostic centers should be prepared to provide the following services:**

##### **I. Measures of auditory sensitivity**

###### **A. Auditory brainstem response (ABR)**

Infants who do not pass the newborn hearing screening or rescreen should be evaluated with a click-evoked air-conduction ABR and at least one low-frequency tone burst ABR, preferably at 500 Hz. Response waveforms should be measured at several levels to allow threshold determination and latency-intensity functions. When thresholds are determined to be elevated, the audiologist may measure the ABR with frequency-specific stimuli at other frequencies as well. Infants suspected of having significant conductive hearing loss should be considered for bone-conduction ABR testing. Clinicians should be aware that technological advances will continually improve recommended protocols.

###### **B. Evoked otoacoustic emissions**

Transient evoked otoacoustic emissions (TEOAE) or distortion product otoacoustic emissions (DPOAE) should be used to confirm the magnitude and configuration of the hearing loss as determined by the ABR.

###### **C. Behavioral measures**

At a developmental age of six months or older, it is possible to obtain reliable behavioral audiometric information using visual reinforcement audiometry (VRA). While this test has traditionally been performed in the sound field, ear-specific threshold information can be obtained using insert earphones. VRA is an important technique for use in monitoring auditory thresholds, especially during the first few years of hearing aid use.

##### **II. Measures of middle ear function**

###### **A. Tympanometry**

Although pass/fail criteria for tympanograms from infants younger than six months of age are currently being developed, an infant audiologic evaluation should include an admittance tympanogram at 1000 Hz to help determine middle ear function.

###### **B. Acoustic reflexes**

Ipsilateral or contralateral acoustic reflexes should be measured at a minimum of two activator frequencies (1000 and 2000 Hz) at a probe tone of 800 or 1000 Hz.