

Module 2: Understanding Hearing: How the Ear Works and How to Test Hearing in Infants

Section: Hearing Tests for Infants and Young Children

Two Categories of Tests

- Objective
- Subjective

Activity 2.3: Preparing Families and Children for Audiological Testing

- Explain the role of the parent during their child's audiological testing (e.g., the importance of not reacting to sounds presented in the booth, distracting their child during evaluation).
- Share the purpose of each test. Discuss how the information gathered may be used to guide understanding of their child's hearing abilities as well as the relationship of this audiological information to the planning of language and communication approaches.
- For objective tests, discuss considerations for the family:
 - Explain to the family that their child may need sedation for an auditory brainstem response (ABR) test as this test must be completed with the child quiet and not moving. There is a possibility that this test may be completed without sedation while the child is sleeping; however, sedation may be necessary depending on the child.
 - If their child is to be sedated, explain to the family what to expect. The hospital or audiologist may have already explained this. If not, consider calling the center completing the ABR to find out and share more with the family about the process.
 - For a child having an unsedated ABR, remind families of the importance of keeping the child awake prior to the testing so that he or she will sleep throughout the evaluation.

- For otoacoustic emissions (OAE) testing, explain to the family about the importance of a child laying/sitting quietly so that a valid test measurement can be obtained.
- D. For subjective tests that require the child’s participation, practice the evaluation activities with the child at home. For example:
- For visual reinforcement audiometry (VRA), practice making sounds at the child’s side out of his or her visual field. When the child looks to the sound, provide reinforcement (e.g., praise, motivational toy). It is helpful when a child is in a highchair. The sounds can be made by a noisemaking toy or they can be the parent’s voice.
 - For conditioned play audiometry (CPA), teach the child the “listening game” that will be using during evaluation. Choose an appropriate toy (e.g., blocks and bucket, pegs and pegboard, rings and stacker) and demonstrate holding the toy to your ear while waiting for the beep. Be creative in identifying CPA activities. Use what is available in the home (e.g., cotton balls in a bowl, fruit in a basket). Some children do better if the listening game toy is one used only for this evaluation. The sounds for the home activity can be made by a parent, or there are free smart phone apps for “pure tones” that allow parents to include the same sounds the child will hear during the audiology appointment.
- E. Ask the family if they may be interested in having you accompany them for their child’s audiological evaluation. This can promote collaboration among professionals from the child’s early intervention team.
- F. Encourage parents to:
- generate a list of possible questions for the audiologist prior to testing. Have the parents share these questions with the audiologist at the start of testing as they may impact the testing protocol. For example, if the family is concerned that there might be a conductive (outer or middle ear) component to the child’s hearing, the audiologist may want to attempt bone conduction testing earlier in the visit before the child fatigues.
 - set up and maintain a binder to organize all the hearing testing information they will be receiving in a centralized place.

- G. Keep in mind and share, as appropriate, the following considerations for families of a child with identified disabilities:
- A child with motor delays may be more responsive if placed in a supportive child seat (e.g., Boppy or Bumbo seats) rather than on someone's lap. (Note: This is beneficial for all children so the audiologist can better observe a child's response to sound without having the child restricted by the parent's hold or inadvertently having the child react to the parent's response to a sound.)
 - A child with sensory issues may need a little extra time to acclimate to a sound-proof booth or might benefit from some practice wearing ear buds prior to the visit.
 - In general, the family might want to alert the audiologist prior to the visit that the testing may require extra time and that having two audiologists (or an assistant) available would be particularly helpful.

For more information about the various types of tests and their purpose:

- [*Hearing Tests to Expect As Your Child Grows*](#)
- [*Testing Hearing in Infants*](#)

Additional Resources:

- [*How to Prepare Your Child for a Hearing Test*](#) (Everyday Hearing website)
- [*Hearing Tests and Your Child*](#) (The Elizabeth Foundation)
- [*Play Audiometry*](#) (video)

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