



Children's

National Medical Center

Serving Children and Their Families Since 1870

**CHILDREN'S HEARING AND SPEECH CENTER
CHILDREN'S NATIONAL MEDICAL CENTER**

111 Michigan Avenue, N.W.
Washington, D.C. 20010
(202) 476-5600

**SLEEP-DEPRIVED/NATURAL-SLEEP
AUDITORY BRAINSTEM RESPONSE (ABR) TESTING**

This test is also called a “BAER” hearing test, ABR and BAER tests are the same.

PATIENT INFORMATION

Your child has been scheduled for sleep deprived auditory testing. An ABR test is an objective measurement of the integrity of a portion of the auditory system. This test provides diagnostic information to determine if hearing loss is present and at our Center is performed on children aged birth to 6 months old.

ABR tests examine electrical activity generated from the auditory system and the lower brainstem in response to sound. Your child will wear scalp electrodes on his/her forehead and ears. Small cords will connect the electrodes to a computerized system. Small earphones will be inserted into your child's ear canals, which will transmit sound. A specific auditory-brainstem pattern, in the form of a brain wave, can be picked up by the electrodes and analyzed on a computer from the sound transmission through the auditory system. These auditory-brainstem wave patterns can estimate your child's level of hearing for certain speech frequencies. This test is non-invasive and will not harm your child; your child must be asleep for this test.

To successfully evaluate your child's hearing, he or she will need to be asleep for about 1.5 hours during the test. To help ensure that your child will be asleep for the procedure, please follow these instructions:

- 1) BRING YOUR CHILD TO THE APPOINTMENT AWAKE BUT READY FOR SLEEP.**
- 2) KEEP YOUR CHILD UP LATE THE NIGHT BEFORE THE TEST.**
- 3) WAKE YOUR CHILD EARLY THE MORNING OF THE TEST.**
- 4) NO NAPPING 4 HOURS BEFORE THE TEST.**
- 5) DO NOT ALLOW YOUR CHILD TO SLEEP IN THE CAR ON THE WAY TO THE APPOINTMENT.**
- 6) BRING YOUR CHILD HUNGRY AND BRING MILK OR FORMULA. YOU MAY FEED YOUR CHILD AT OUR CENTER IMMEDIATELY PRIOR TO THE TEST.**

The entire appointment time takes approximately 2-3 hours. You may be asked to hold/cradle your child throughout the testing procedures. Test results are analyzed by the audiologist and discussed with you. Should you have questions regarding these procedures please do not hesitate to contact our Center (202) 476-5600.