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[nationwidechildrens.org](http://nationwidechildrens.org)

## B.A.E.R. TEST

The Brainstem Auditory Evoked Response Test, or B.A.E.R. Test, is used to evaluate the function of the auditory nerve (the nerve which carries sound through the ear to the brain). This test may detect possible hearing loss. The test is used in infants and young children who may not be able to respond to other hearing tests. Your child might need this test if he has had meningitis (an inflammation of the membranes of the brain), sepsis (a bacterial infection), or has taken medicine that may have affected hearing.

### HOW TO PREPARE FOR THE TEST

- If your child is old enough, explain what will happen during the test. The nurse and technician will do this also.
- If your child is an infant, bring formula and a bottle with you to the test.
- Before the test, your child's hair will need to be shampooed, rinsed well, dried, and combed, so that the electrodes can be attached easily. The shampooing will be done by a parent or nurse.
- **Do not use hair spray, hair dressing, or oil on the child's hair after it is washed.** Hair dressing or oil prevents good contact between the electrodes and skin.
- Do not tease the child's hair.
- **Do not give your child coffee, tea, soda pop, or chocolate for 24 hours before the test.** Any stimulants can prevent your child from relaxing.
- Your child will need to be sleepy for the test. Therefore, wake up your child at 5 a.m. on the day of the test and keep him or her awake until it is time for the test. Do not even let him take short naps.
- Your child may receive medicine to sedate or calm him. If he does, a parent will need to stay with him until he is completely awake after the test.
- Parents may wait in the 3<sup>rd</sup> Floor waiting area.

### HOW THE TEST IS DONE

- A technician will talk to your child about how the test is done.
- Small surface electrodes (discs) (Picture 1, page 2) will be attached to the scalp at the top of the head and by each ear and on the back of the neck. Your child's head will be cleaned with gritty electrode gel and then the electrodes will be attached with squares of gauze covered with glue. The glue is gently blown dry with a hand-held dryer. The dryer sounds like a hair dryer at home.
- Wires from the electrodes will be attached to the machine.
- Earphones will be placed over both ears (Picture 2, page 2).

<b>▪ For Outpatient Use Only</b>
<b>▪ Child's name</b> _____
<b>▪ APPOINTMENT:</b>
<b>▪ Date _____ Time _____</b>
<b>▪ Please bring your child to 3TN/EEG Lab.</b>
<b>▪ Please come 15 minutes early to allow time to register.</b>

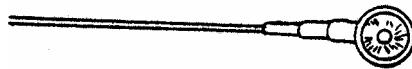
## HOW THE TEST IS DONE (continued)

- Your child will be asked to lie very still, keep his eyes closed, and relax.
- A clicking noise will sound in one ear and then the other ear. The machine will record the electrical response of the auditory nerve to the clicking sound.
- This test takes about 1 to 2 hours.

## AFTER THE TEST

- The glue will be removed with a cleanser that smells like fingernail polish remover. The scalp may look a little red, but the redness will soon disappear.
- If any glue remains, parents may remove it at home by applying hair conditioner, combing, then shampooing.
- There may be some redness around the ears from the headphones, but this will soon disappear.
- A doctor will read the test results. The report will then be sent to your child's doctor or clinic and your doctor will discuss the results with you.

If you have any questions, please ask the doctor, nurse, or technician.



**Picture 1** An Electrode Disc.



**Picture 2** Having a Brainstem Auditory Evoked Response (B.A.E.R.) Test.