

## Why was an Auditory Brainstem Response Test recommended?

### For children, birth to 6 months:

The most common reason why a child needs an ABR is that their newborn hearing screening results indicated the need for further testing (a referral).

### Other reasons why a child may need an ABR:

- History of meningitis
- NICU stay of more than five days
- Blood transfusion or treatment with intravenous antibiotics
- History of high levels of jaundice
- Abnormally shaped ears
- Exposure to drugs or alcohol during pregnancy

There are other things associated with a high risk of hearing loss. Your child's health care provider should tell you about any concerns before you take your child home from the hospital.

### For children, ages 6 months or older:

A standard hearing test will almost always be attempted before an ABR. Only after several unsuccessful standard testing attempts will your audiologist recommend an ABR.

### Common reasons why an older child needs an ABR:

- Cannot complete standard hearing tests
- Concerns about hearing loss
- Speech and/or language delay

## Questions about the Auditory Brainstem Response Test?

SCF Audiology is here to answer any questions you may have about the ABR. We work closely with your child's primary care and other medical providers to be sure the test is completed in a safe and responsible manner.

### Contact Us

**Southcentral Foundation Audiology**  
Alaska Spine Institute/University Lake  
Medical Building  
3801 University Lake Drive, Suite 220  
Anchorage, Alaska 99508  
Main: (907) 729-8844  
[southcentralfoundation.com/services/audiology/](http://southcentralfoundation.com/services/audiology/)



## Auditory Brainstem Response Testing



*Find out how your child is hearing when they are not able to tell you themselves.*

### Southcentral Foundation Audiology



The Alaska Native Tribal Health Consortium and Southcentral Foundation jointly own and manage the Alaska Native Medical Center under the terms of Public Law 105-63. These parent organizations have established a joint Operating Board to ensure unified operation of health services provided by the Medical Center.

## What is an Auditory Brainstem Response Test?

The auditory brainstem response test is a special test that audiologists use to measure responses from the hearing nerve.

When we hear a sound, our ears send electrical signals along the hearing nerve to our brain. The ABR measures those signals, which tell us how the nerve is responding and how healthy it is.

The ABR is typically used on children who need a hearing test but are too young or unable to participate in standard hearing tests.

The test can take one to three hours. To collect accurate results, your child will need to be sleeping, or in a very calm and relaxed state.

There are two types of ABR tests:

- Natural sleep
- Sedated

Both types of ABR collect hearing information the same way. The important difference is the sedated ABR requires medication to help the child relax and fall asleep. The natural sleep ABR does not require any medication.



## Natural Sleep Auditory Brainstem Response Test

Natural sleep ABR testing is exactly as it sounds. If your child can sleep during the test, the audiologist has the best chance of getting accurate results. If your child is not asleep but is in a calm and relaxed state, the test may take longer, or results could be limited. If the results are limited, the ABR might need to be repeated to collect the missing information.

During the ABR, you can choose to hold your child or place them in a bassinet while they sleep. We recommend using whichever method will help your child sleep soundly. Please remember, the better your child sleeps, the more accurate the results.

These tips will help your child arrive ready to sleep:

- Try your best to keep your child awake before the appointment, so they arrive tired.
- If your child has no dietary restrictions, please keep your child from eating one to two hours before the ABR. You'll be able to feed them right before the test starts, which will help them sleep.
- Make sure the person holding the child is ready to sit comfortably for the length of the ABR.

## Sedated Auditory Brainstem Response Test

Sedated ABR testing is completed under anesthesia — using medication to help your child fall asleep. This type of ABR has a trained nurse and a doctor watching your child the entire time to make sure there are no problems during the test.

A child who will be sedated will have other appointments scheduled before the ABR. They will see a health care provider for a history and physical appointment, typically called an H&P, which is necessary to be sure they are healthy enough to take the anesthesia medication. SCF Audiology will help coordinate all appointments that may be needed before the ABR.

The following are general rules about eating and drinking before the ABR. If your child has any specific dietary restrictions, please talk to their health care provider about this before the ABR.

The ABR will always be scheduled first thing in the morning. Children with no immediate health concerns should not eat or drink anything starting six hours before the test. A general rule is no food or drink after midnight the night before the ABR.

**Please follow this instruction carefully.**

**If your child eats or drinks anything before the sedated ABR, the test will be canceled.**

