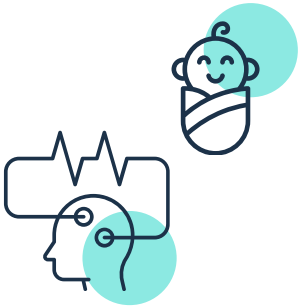
VALLEYHEALTH

ABR Hearing Test: What It Is and Who Needs It

An Auditory Brainstem Response (ABR) test is a safe, painless way to see how sound travels from the ear to the brain. It measures the brain's response to sounds like clicks or tone bursts, which helps estimate hearing levels.

During the test, small electrodes are placed on the forehead and behind the ears. A computer records the timing of sound signals as they travel along the hearing pathway.

Who Might Benefit from ABR Testing?



ABR is commonly used for **infants,** because it is one of the only reliable ways to test hearing at that age. It can also help **toddlers** when standard "booth" testing is not possible.

ABR can be used for **adults,** too. In adults, the goal is often to look for possible neurological causes of hearing-related symptoms, especially when additional testing is being considered.

When ABR Results Are Most Helpful

ABR is especially helpful when standard listening tests aren't reliable. It can confirm hearing loss and estimate hearing levels to guide next steps.

ABR is often recommended when:

- A newborn hearing screen was not passed
- No newborn screen was done
- Parents have concerns over their child's hearing
- Booth testing is not possible

What Happens During the Test

ABR testing is quiet and noninvasive. You will hear soft clicks or tone bursts through earphones while the electrodes measure the brain's response.

For infants and children, the audiology team starts at a sound level a child should hear and slowly lowers the volume. The test tracks waveforms and helps identify the lowest level where the response is still seen.

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Babies vs. Toddlers: Why Sleep Matters

ABR results are affected by movement and noise, so the test works best when a child is asleep or very still. Infants often sleep naturally during testing, which makes the process easier.

Toddlers can be harder to test because they may not stay still long enough. In some cases, sedation may be needed so the test can be completed accurately.

Another Common Infant Hearing Test: OAE

Another way to test infants is **otoacoustic emissions (OAE).** A small insert is placed in the ear, a signal is sent in, and the inner ear sends a response back that can be measured.

ABR and OAE may be used together to help clarify whether hearing loss is present and what type of follow-up is needed.

Limitations and What to Expect

The main limitation of ABR is that a baby who is fussy or crying may require breaks. If a child is upset, the test may need to pause until they calm down.

Even with that challenge, ABR is very useful because it is based on measured responses, not behavior. This helps families get clear information and plan next steps sooner.

Hearing concerns can be stressful, but ABR testing offers a clear, safe way to understand how sound is reaching the brain. Valley Health provides ABR and other hearing evaluations to help families and patients make informed decisions and access support early.

To learn more or schedule a visit, contact Valley Health or visit valleyhealth.org.