

Auditory Brainstem Response (ABR)

Also known as auditory evoked potentials measurements, an ABR is used when more information is needed to complete an in-depth evaluation of the hearing, or auditory, system.

How is the Test Done?

ABRs can be done when a patient is awake so long as the patient stays still. For young children and others who can't stay still, the test can be done under mild sedation. During the test, electrodes are placed on the scalp or forehead and on or behind the ears. A series of sounds are presented, and the electrodes pick up the energy produced by the auditory nerve and brain in response to the sound. A computer averages the responses and produces a wave that shows the brain's response.

What Information Does the ABR Provide?

The ABR can be used to identify hearing loss and possible causes in infants and others who are hard to test. In addition, analysis of the ABR pattern can help identify certain medical conditions, such as multiple sclerosis, that can affect hearing.