

Hearing & Amplification

Newborn Screening

How Does Newborn Hearing Screening Testing Work?

Currently there are two tests that hospitals and agencies use to screen babies for hearing loss. Both of these tests are safe and comfortable. They pose no risks for babies.



Otoacoustic Emissions

One of the tests is called **otoacoustic emissions** or **OAEs**. For this test, a miniature earphone and microphone are placed in the ear, sounds are played and a response is measured. If a baby hears normally, an echo is reflected back into the ear canal and this is picked up by the microphone. When a baby has a hearing loss, no echo can be measured on the OAE test.



Auditory Brainstem Response

The second test is called **auditory brainstem response** or **ABR**. For this test, sounds are played to the baby's ears. Band-aid like electrodes that are placed on the baby's head detect brainwaves. This test actually measures the brain responding to sounds. This test also identifies babies who have a hearing loss.

The two test methods may be used individually or in combination. In some hospitals, babies are first screened using OAEs, and the babies who do not pass this test are given the ABR test.

Both tests are accurate and reliable. Your hospital has selected a method based on hospital resources, available personnel, cost, and the number of babies born in the hospital.