## **Hearing Screening**

## Screening is the first step in finding babies that need additional testing to identify a hearing loss

Newborn hearing screening provides a quick and cost effective way to separate babies into two groups: a pass group and a refer group. The babies that pass the screening are presumed to have no hearing loss, at the time of screening. Those who refer are in need of in-depth evaluation by an audiologist and may also need follow-up care from other professionals, such as a pediatrician or an otolaryngologist (ENT).

## There are two types of screening tests used to evaluate infant hearing status:

- Otoacoustic Emissions (OAE): Sounds are presented to the baby's ears through a soft ear probe, placed just inside the ear canal. The inner ear, or cochlea, responds to these sounds by producing an echo, which is measured by a microphone in the ear probe. OAEs may be affected by debris or fluid in the external and middle ear, resulting in higher referral rates when screening is performed during the first 12 hours after birth.
- Automated Auditory Brainstem Response (AABR): Sounds are played through soft earphones into the baby's ears. Band-aid-like electrodes placed on the baby's skin measure electrical activity along the hearing nerve as the sound travels from the ear to the brain. AABR is slightly less affected by middle or external ear debris than OAE, but it does require that the newborn be sleeping or in a very quiet state. AABR screening is always the test of choice for babies in the NICU!

