Helpful Information regarding Auditory Brainstem Response (ABR) Test at Hilo Medical Center:

Nearly every baby born in a hospital in the United States is screened for hearing loss before leaving the hospital. All 50 states, the District of Columbia and Puerto Rico have newborn hearing screening programs. Infants who do not pass their newborn screening will require further diagnostic hearing testing before they are 3 months old.

The Auditory Brainstem Response (ABR) evaluation is a painless test that allows an audiologist to measure your baby’s hearing sensitivity and it is the test recommended for babies who do not pass their newborn hearing screening or for whom there is a concern about hearing.

Your baby must be in a deep sleep during the test. To accomplish this, we recommend that you try the following:

- Wake your baby earlier than usual before leaving the house.
- Keep your baby awake on the way to the hospital and in the waiting room prior to testing. Having a second adult who can sit in the backseat of the car with your baby may be helpful.
- If your baby has a scheduled feeding, wait until you are brought into the room for testing to feed them.

Once you arrive at the Audiology Department at Hilo Medical Center, the audiologist will bring you and your baby to a quiet room where the testing will be performed. The skin on your baby’s forehead and behind each ear will be cleaned and small sticker sensors will be placed. At this time, lights will be dimmed and you will be given time to feed/soothe your baby so he/she can go to sleep. If you would like, you can hold your baby throughout the test procedure.

Once your baby is asleep, small foam earphones will be placed in the ears and the sensors will be attached to the audiologist’s computer. Sounds will be played through the earphones and the computer will record the hearing nerve’s response to the sounds in each ear. Any movement, such as sucking or eye blinking may interfere with the audiologist’s ability to interpret responses and complete testing.

The appointment length is typically two hours, but the time needed to complete testing will depend on many factors, including how well your baby sleeps. When testing is completed, the audiologist will explain all of the results and provide you with any additional recommendations and resources.
Babies under 6 months

The most important way to prepare your baby for the test is to show up with a tired, hungry baby. Most young babies will sleep through the entire test if they are brought to the appointment ready for a feeding and a nap. Try to keep your baby awake and hold off feeding him or her until you get to the appointment. Once you are in the testing room and your child has been prepped for the test, you can nurse or feed your baby a bottle so he or she falls asleep naturally. The test will take place while your child sleeps in your arms or their carriage, which-ever is most comfortable for you and your baby.

Fast Facts About the Auditory Brainstem Response (ABR) Test

- The ABR test measures the reaction of the parts of a child’s nervous system that affect hearing. (The ABR test measures the hearing nerve’s response to sounds.)
- An ABR test is often ordered if a newborn fails the hearing screening test given in the hospital shortly after birth, or for older children if there is a suspicion of hearing loss that was not confirmed through more conventional hearing tests.
- The ABR test is safe and does not hurt.
- The ABR test can be completed only if the child is sleeping or lying perfectly still, relaxed and with his or her eyes closed.
- If your child is younger than 6 months of age, the ABR test usually can be done while he or she naps.
- The test itself takes about 1 hour to 1.5 hours, but the entire appointment will take about 2 hours.