



## **Otoacoustic Emissions (OAE)**

## What is an OAE?

An OAE helps identify the status of your child's hearing. It is an indirect measure of hearing and is limited to providing only a result of hearing loss present or absent. In other words, it does not give the full picture regarding the severity of a hearing problem, rather only a "yes" hearing is normal or "no" there is a hearing loss of some degree.

## What is involved?

A soft probe is placed into the ear canals. Soft sounds are played into the ear; when the ear is working normally, thousands of invisible hair cells in the ear move in response to the incoming sound. When the hairs move, they make sounds of their own, which leak back out through the ear and are measured by a sensitive microphone located in the probe. When hearing loss exists, the hair cells are damaged and do not emit a sound.

## How to prepare for the test:

There are a number of factors that can negatively impact the accuracy of the test. Most of these are within our (both tester's and parent's) control. The single best way to ensure a successful test is to have your baby asleep and OUT of the car seat. While it is more convenient to leave the child in the car seat, the ear cannot be accessed to insert the probe.

Make sure your baby is as comfortable as possible, for example, fed, clean diaper and, if possible, swaddled. Nursing or feeding during the test is OK, but sucking can have a negative impact on the test. However, if this is the only way to ensure a quiet, happy baby, then this is preferred.

Please make sure cellphones are turned off. Young siblings in the test environment are not permitted as they are often unable to be completely quiet during the test.

You will need to hold your baby in such a way that his or her hands do not grab a hold of the test probe. The tester will be busy operating the equipment and holding the probe in place. This may require another family member or friend in the room to help if the youngster is fussy or is irritated by the probe. Rest assured, though, the probe is not painful in any way. Infants just have a natural aversion to something in their ears.