OTOACOUSTIC EMISSIONS (OAE)

Quick Reference Guide

Purpose

Otoacoustic emission testing (OAE) tests the function of the outer hair cells in the inner ear. The outer hair cells vibrate and produce an echo when stimulated. The sound can be measured using the small probe inserted into the ear canal.

Testing Equipment

- Probe tip (Figure 1)
- IHS (equipment sitting under laptop)
- OAE probe (Figure 2)
- Laptop computer



Figure 1: Infant probe tip



Procedure

- Open IHS program on the desktop.
- Double click the Smart DPOAE icon.
- Swaddle baby. Place baby on side or back, or have caregiver hold baby.
- Select a clean probe tip and insert onto probe.
- Pull down and back on baby's ear to straighten the ear canal.
- Slowly insert probe deeply into ear canal.
- Remove your hand from the probe.
- Start the test when baby is quiet.
- Repeat on the other ear.



Figure 2: OAE probe