

Newborn Hearing Screening

Basic Steps for ABR Testing

Careful electrode site preparation is the most important part of getting an accurate screening test. Low electrode impedance is essential to reduce noise in ABR recordings.

- **Be sure the baby is quiet;** sleeping is ideal.
- **Prepare the skin** for electrode (sensor) placement. Lotions can cause higher impedance levels—use a small alcohol wipe to clean the area prior to placing the electrodes if necessary.
- **To help reduce impedance,** electrode gel, water or saline, or a tiny amount of Ten20 paste can be used when placing the electrodes.
- **As you place the electrodes** on the baby's skin, use firm pressure, pressing down for a few seconds on each electrode to give it a chance to stick.
- **Orient the electrode wires** so they are all facing the same direction—away from the top of the baby's head usually works best.
- **Make sure the wires are not crossed** – this can cause interference.
- **After the electrodes are placed,** put the probe or insert earphone in the baby's ear, or place ear couplers over the ears. Ear couplers need to be positioned on the ear so they completely cover the external ear and the cables are to the front of the baby.
- **Position the baby to minimize neck artifact.** Swaddling the baby also helps make sure he or she will not interfere with the probe position or ear couplers during testing.
- **Monitors and other electrical equipment** in the room can sometimes cause electrical interference. May need to ask medical staff if it is possible to temporarily unplug medical equipment and use battery power instead during the screening.
- **When the screen is complete,** take the electrodes and ear couplers, if used, off the baby. (If the couplers seem stuck, support the underlying skin with your fingers and gently lift the edge of the coupler.) Using water on a gauze or paper towel to saturate and soften the sensor will make it slippery and easy to remove.
- **Please fill out a pink (for an initial hearing screen) or blue (for a re-screen) card and send it to:** Washington State Department of Health – EHDDI Program
1610 NE 150th Street, PO Box 55279, Shoreline, WA 98155.

ABR TESTING

Newborn Hearing Screening ABR and OAE Equipment Checklist

○ **Has your equipment been calibrated within the last year?**

This is necessary, in addition to the annual electrical safety checks done by your biomedical department.

For most OAE equipment, and Biologic OAE and ABR equipment, contact:

MSR Northwest

6520 212th St SW, Ste 208, Lynnwood, WA 98036

Phone: 360-282-4170 or 800-950-3277

Fax: 360-282-4175

<http://msrwest.com>

For Natus equipment, contact:

Natus Medical

Toll-free Phone: 800-303-0306

Hours: Monday–Friday, 6:00 a.m. – 5:00 p.m. Pacific Time

www.natus.com



○ **Do you have spare supplies on hand?** This would include probe tips in different sizes for OAE and/or ABR, electrodes/sensors and ear couplers for ABR, and any other supplies you use regularly. Supplies can be ordered through the above companies.

○ **Does someone regularly perform a listening check** and/or probe check according to manufacturer's instructions? For technical assistance, contact the above companies.

○ **Do you know how to order more pink and blue cards for reporting data to the state?**

Washington State Department of Health – EHDDI Program

1610 NE 150th Street, PO Box 55279, Shoreline, WA 98155

Phone: 206-418-5613 Fax: 206-364-0074

E-mail: NBS.Prog@doh.wa.gov

www.doh.wa.gov/earlyhearingloss

For persons with disabilities, this document is available on request in other formats.

To submit a request, please call 1-800-525-0127 (TTY/TDD 711).