

# USING ILS WITH COCHLEAR IMPLANTS AND OTHER HEARING DEVICES

by Ann Brownstone, MS, OTR/L

1. Where are the headphone cups placed?

Cochlear implants: directly over the receiver or the processor, which is typically just above and behind the ear. The processor should be powered “on”.

Bone anchored hearing aids (BAHA’s) or hearing aids: The BAHA or hearing aid should be removed, as they emit feedback when headphones are placed near them. For clients with hearing aids, place the headphone cup over the ear, for those with BAHA’s place the headphone cup where the BAHA is usually placed, or over the ear.

2. What air conduction level should be used?

Volume should be adjusted to the listening comfort and capability of the client. If possible the attending audiologist should be consulted for ideal volume levels, or an audiogram is helpful to determine sound perception levels, aided (and unaided in the case of BAHA’s and hearing aids). The clients in the study with cochlear implants typically listened at +1, and those who removed their devices (BAHA’s and hearing aids) listened from +2 to +3.

3. What bone conduction level should be used?

Use the protocol offered by iLs, and increase as tolerated to +1. Watch the client carefully for signs of over stimulation, such as prolonged bedwetting or irritability.

4. What iLs program is best for the clients with hearing loss or impairment?

Follow the guidelines created for hearing typical clients, i.e. use the clinical reasoning that rests on the hierarchy of challenges (sensory motor, attention, reading/auditory processing and optimal performance). Clients with early or congenital hearing loss/impairment may likely have vestibular dysfunction as well, so the sensory motor zones are typically very therapeutic. Additionally, they need a wide range of stimulation, so the sensory motor program combined with the reading/auditory processing program (to give them the higher frequencies) was used in the pilot study.

Resulted from a Pilot Study at the Weingarten Children's Center, formerly known as the Jean Weingarten Peninsula Oral School for the Deaf, Redwood City, CA, overseen by Ann Brownstone, MS, OTR/L, Jennifer Aguilar, MS, CCC-SLP, Lisa Marcacci, MS, Aud