Cochlear Implants

A cochlear implant is a small, complex electronic device that can help to provide a sense of sound to a person who is profoundly deaf or severely hard-of-hearing. The implant consists of an external portion that sits behind the ear and a second portion that is surgically placed under the skin. An implant has the following parts:

- A microphone, which picks up sound from the environment
- A speech processor, which selects and arranges sounds picked up by the microphone
- A transmitter and receiver/stimulator, which receive signals from the speech processor and convert them into electric impulses
- An electrode array, which is a group of electrodes that collects the impulses from the stimulator and sends them to different regions of the auditory nerve

An implant does not restore normal hearing. Instead, it can give the student a useful representation of sounds in the environment and help him or her to understand speech (www.nidcd.com).

Simple Troubleshooting Tips for Cochlear Implants

Child does not respond to sound during behavioral check

1. Make sure the device is turned on
2. Turn the processor off and then back on
3. Change or replace the battery (some are rechargeable)
4. Make sure processor is set to the correct program and settings
5. Does it appear that all cables and cords are plugged into processor; do any cables appear twisted or broken?
6. Use monitor earphones or listening check device to verify microphone function, if available

*If any of these problems persist after troubleshooting attempts, notify the student's parent(s) of the situation so that they can contact his/her managing audiologist.