# Hearing Aids

## Hearing Aid Technology

There are currently three levels of hearing aid technology: analog, programmable, and digital.

* **Conventional Analog** - this is the oldest hearing aid technology available today. This type of circuit will amplify everything that enters the microphone, whether it is speech or background noise. It is basic hearing aid technology.
* **Programmable** - this more advanced technology has a computer chip inside, which enables the audiologist to program the settings of your hearing aid based on your hearing loss and lifestyle. This hearing aid can be programmed for ease of listening in different environments. It is improved technology with fine-tuning flexibility.
* **Digital** - this is the most advanced technology currently available. These hearing aids process sound using incredibly fast speeds. Digital hearing aids transform analog information into a digital signal and process the sounds to maximize the speech information you want to hear, while minimizing the amplification of sounds you do not want to hear. Digital technology allows the audiologist to customize the sound of your hearing aid to meet your needs.

Cochlear Implant   
For those who presently wear a hearing aid, but obtain little benefit, a cochlear implant may provide a sensation of "hearing". A cochlear implant is a small complex device that bypasses damaged structure in the inner ear and directly stimulates the auditory nerve. The implant device has two parts: the surgically implanted receiver, which placed under the skin behind the ear; and the body worn speech processor. Since not all children with significant hearing loss can obtain benefit from a cochlear implant, potential candidates must undergo a selection process.