

Cochlear Implant Frequently Asked Questions

What is a cochlear implant? A cochlear implant is a small surgically implanted medical device that can help provide sound to individuals with moderate to profound hearing loss. A cochlear implant consists of an *external* portion that sits on the ear or behind the ear and a second *internal* portion that is surgically implanted under the skin.

How does a cochlear implant work? A cochlear implant works very differently from a hearing aid. Hearing aids work by *amplifying* sounds. A cochlear implant works by *bypassing* damaged portions of the ear and directly stimulating the auditory nerve. Signals generated by the implant are sent from the auditory nerve to the brain which recognizes the signals as sound.

What does a cochlear implant sound like? Hearing through a cochlear implant is very different from normal hearing and takes time to learn or relearn. Every cochlear implant recipient describes their auditory perception differently, but it is commonly reported that sounds are robotic, tinny, and loud- especially when the device is first activated. For most patients, the sound quality will continually improve over the first six to twelve months.

How frequently do I need to come for appointments after I get a cochlear implant? A

cochlear implant is a lifelong commitment. In the first six months after getting a cochlear implant, you will have five to seven reprogramming appointments. These appointments are set up to provide you with a transitional period to help you acclimate to the new sounds you will hear through your cochlear implant. Following these initial appointments, you should expect to be seen every six months to every year.

What are the main parts of a cochlear implant?

An implant has the following parts:

- Microphone, which picks up sound from the environment.
- Speech processor, which selects and arranges sounds picked up by the microphone.
- Transmitter and receiver/stimulator, which receive signals from the speech processor and convert them into electric impulses.
- 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.