

Hearing & Amplification

Cochlear Implants

Limitations And Risks

Cochlear implant recipients are unable to undergo certain medical procedures, should the need for these occur at some later date. These include:

- Magnetic Resonance Imaging (MRI) testing. Unless the recipient has an implant with a removable magnet, this testing cannot be performed.
- Electro surgery or diathermy in the vicinity of the implanted portion of the cochlear implant.
- Electroconvulsive therapy.
- Ionizing radiation therapy

Static electricity can potentially damage the electrical components of the implant system or erase programs saved to the speech processor. Some simple steps in preventing static electricity from affecting the speech processor is to remove the speech processor while the child is playing on plastic slides or in plastic ball pits (such as those found at some fast food restaurants). Avoid contact with the speech processor until you have touched your child. By touching your child before you reach for the speech processor you will ground yourself and avoid passing static electricity to the processor. Your audiologist may offer other suggestions to protect your child's speech processor from static electricity.

Surgical risks include a slight chance of damage to the facial nerve or the chorda tympani-two nerves that pass through the middle ear space. The risk from anesthesia needed for the implant surgery is slightly higher in infants and young children, as compared to adults. Also, some patients experience reduced balance function for a short period immediately following surgery. Finally, a small percentage of implant patients have reported an increase of tinnitus (ringing in the ears) after the surgery as compared their previous experience.

There is a chance of a problem occurring with the internal portion of the cochlear implant system after it is implanted. However, based on reports from the current cochlear implant manufacturers, the Cumulative Survival Rate (CSR) is approximately 99% after one year and more than 96% after three years. If a problem with the internal component were to occur, the faulty device is typically removed and replaced with the most current cochlear implant technology available. If internal device failure occurs during the first 10 years after implantation, the manufacturer's warranty will cover any costs for re-implantation not covered by the insurance companies. If the cochlear implant needs replacement beyond the 10-year warranty period, the responsibility for replacement would be dependent upon the person and their insurance company.

The implanted portion of the cochlear implant system is unaffected by running, swimming, or any normal activity. Some simple precautions are recommended to protect the device from trauma and damage. These include wearing a helmet when bicycling, skateboarding or roller-skating to help prevent damage to the internal device in the event of a fall. The processor must be removed when swimming or engaging in other activities where the external parts could get wet. Children with cochlear implants can participate in all common childhood activities.