



Cochlear Implants

Patient and Family Education

This teaching sheet contains general information. Please talk with your child's doctor or audiologist to get more specific information. Call **813-262-1330** to schedule an appointment.

What is a cochlear implant?

A cochlear implant is a small electronic device that can help your child hear and understand speech better. It is placed inside your child's ear during a surgery.

- It does not replace normal hearing
- Your child will need speech therapy or auditory verbal therapy in order to use it
- The earlier your child gets a cochlear implant, the better his/her speech and language skills will be.

How does a cochlear implant work?

Some parts of the cochlear implant are on the outside of the skin such as:

- A small headpiece worn behind the ear called the speech processor.
- A thin cord that connects the headpiece with a magnet

Some parts of the cochlear implant are on the inside of the skin such as:

- An electrode array is placed inside your child's cochlea (inner ear)
- A magnet

The speech processor has a microphone that picks up sounds from around your child and sends them to the internal component. The implant sends electrical energy to the inner ear, the hearing nerve, and then to the brain. Your child's brain will learn to interpret this energy as sound.

Who can get a cochlear implant(s)?

- A child with severe to profound hearing loss in both ears or a child with auditory neuropathy
- Have used hearing aids with intense speech therapy or auditory verbal therapy for at least 3 to 6 months.
- Have limited benefit from hearing aids
- Be attending a speech therapy or auditory verbal therapy program that uses speaking as the primary mode of communication.
- Be at least 12 months of age and healthy enough to have a major surgery.

Your family should be ready for a lot of training, speech therapy or auditory verbal therapy, and follow-up visits.

Can a cochlear implant help my child?

No one can tell for sure how well your child will do with a cochlear implant. Younger children have been shown to do better than older children with a cochlear implant. Your child will need a lot of follow-up care and therapy to receive the most benefit from their cochlear implant.

- For some children, a cochlear implant can only provide sound awareness.
- Other children can have conversations with other people, talk on the phone, and be in a regular classroom at school. Their speech sounds like that of a child with normal hearing.

How is the device implanted?

A cochlear implant is placed by a doctor during a surgery.

- Your child will receive general anesthesia. This is medicine that makes your child sleep deeply so that they cannot feel anything.
- The surgery usually takes 2 to 3 hours.
- Your child may spend a night in the hospital.

To do the surgery:

- The ear doctor cuts into the skin behind the ear and makes a hole in the bone.
- The ear doctor puts the implant into the cochlea (inner ear) and closes up the skin.

- Your child's ear and head are wrapped with a pressure bandage to reduce swelling. The bandage is removed the next day.
- Your child can usually go back to school in about 1 week.

Does my child need follow-up care?

You and your child will need to see your child's audiologist (person who evaluates and manages hearing loss) about 4 weeks after surgery. Your child will be able to wear his/her cochlear implant home from this session. At this visit, the audiologist will:

- Fit your child with the speech processor and magnet
- Turn the cochlear implant on with a computer
- Set the loudness levels by seeing how your child reacts to sound.

Your child will need to make several visits to see the audiologist for the first few months to adjust the cochlear implant. Also, your child will need to continue attending speech therapy or auditory verbal therapy appointments to learn how to understand the sound from the cochlear implant and learn to talk.

Who pays for cochlear implants?

- Cochlear implants (the device, surgery, and follow-up appointments) are covered by most insurance plans and Medicaid. The cost of therapy is usually covered by Medicaid, but may not be covered by all insurance plans.