



Being deaf doesn't  
mean she can't hear



Cochlear

# A parent's guide to cochlear implants

When your child can hear, their world is infinitely enriched. Living and learning become easier.

Life is fuller – around the house and in the outside world, in the classroom and in the playground, meeting others and at home, with you.

Quite simply, a cochlear implant can help overcome severe or profound deafness. So your child can hear. A cochlear implant doesn't cure deafness; but it does offer a life-enhancing alternative.

The Nucleus® implant from Cochlear is not just about hearing; it's about communication. Because with better hearing comes better speaking potential. So you can hear your child better, too.



## What is a cochlear implant?

A cochlear implant is a proven medical option designed to help your child communicate more easily and interact more comfortably with others. It's an alternative to the traditional attempts to improve hearing ability, such as powerful hearing aids, which in some cases provide little or no assistance.

## What are the benefits?

With a cochlear implant, speech and language develop so that your child may be able to attend mainstream schools and enjoy broader education, employment and social opportunities.

A deaf child's speaking and hearing success depends on a number of things, including how long they were deaf before receiving any auditory stimulation. The earlier identification and intervention take place, the greater chance a severe to profoundly deaf child has of gaining speech and language at the same level of development as their hearing peers.

Although cochlear implants can't restore natural hearing, according to parents, children with cochlear implants have enjoyed significant gains in sound awareness and speech understanding. After six months of use, the majority of children respond to their names in quiet environments and spontaneously recognise common sounds in the classroom. And most recipients continue to improve for several years after implantation.

# How has it worked for others?

Frances Kotek of Nottingham, UK received an implant as a four-year-old. When she was ten, her mother told us, "Frances was born deaf and having a cochlear implant has not changed that. It never will. But it has enhanced our family life and given Frances a quality of life to do what she wants in the future.

"Frances is good at sport. She swims and rides horses. She does drama and has spoken to the school assembly. To many parents that's nothing special, but to us it's over five years of growth in maturity and confidence that we would have found hard to believe possible before she had the implant."

And an implant may allow a deaf child to have a relationship with an out of town relative via the telephone "Jessica loves to talk and calls her grandmother every day on the phone to chat," said six-year-old Jessica Chaikoff's mother, of Atlanta, Georgia.

“Today, at the age of four, Ana can hear and speak, sing and recite, whisper, shout and talk all day long,” says Enes Midzic, of his daughter Ana.

Ana, of Zagreb, was diagnosed as profoundly deaf when she was a baby and received her implant just after her second birthday.

“We estimate that her speech development is delayed by less than one year in comparison to hearing children and, as time goes by, she will compensate for it and become practically on par with her hearing peers.”

Halston Cowan of Puyallup received his implant at three years old. His mother says simply “Now he can hear and he is learning to talk”.



*Jessica loves to talk and calls her grandmother every day on the phone to chat.*



## Is a cochlear implant right for your child?

If you decide to investigate further, the next step is a clinical evaluation to determine if your child is a suitable candidate. A skilled team of cochlear professionals can conduct a thorough examination, including hearing and medical tests, and can advise you if your child is likely to benefit. You'll also receive further information about what happens during the implant process.

Before making any decisions, we recommend that you talk to an existing Nucleus® user or parent so that you can ask questions and learn about the realities of life with an implant. You can get in touch at [www.cochlear.com](http://www.cochlear.com)

## Implant surgery and follow-up

Surgery under general anaesthesia is required to implant the internal components of the Nucleus cochlear implant. This routine procedure can be performed in either a hospital or day centre setting. After surgery, the incision generally heals within three to four weeks. And your child will start hearing as soon as we fit the external components. The system is programmed to meet your child's individual hearing needs, and we provide support as your child adjusts to their new hearing. Regular fine tuning of the device ensures that your child gets the most from their system.

## Insurance cover

Many parents find that medical insurance or other forms of financial assistance cover part or all of the cost. This is dependent upon your country's health care system. The implant centre staff can help you explore your options.

*Cochlear has over 175 000 patient years of cumulative experience, drawn from around 40 000 cochlear implant recipients in 78 countries around the world.*

# Why choose Cochlear?


## Cochlear – the world leader

Nearly three quarters (70%) of all implant users worldwide wear Cochlear's internationally award-winning Nucleus products.

Cochlear is the global leader in implant hearing technology. Today Cochlear products are used in more than 1000 clinics worldwide and support around 40 000 recipients in 78 countries.

Solid, long-term financial strategies ensure Cochlear has the size, strength, and ethical business practices that will ensure lifetime support for all recipients.

Cochlear is a publicly listed company operating in an ever expanding list of countries throughout the world. To name just a few, you'll find Cochlear clinics in Australia, Canada, China, France, Germany, Greece, India, Italy, Japan, Korea, Poland, South Africa, South America, Spain, Taiwan, the UK and the USA, providing care and support wherever you are.





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*Cochlear has the size, strength, and ethical business practices that will ensure lifetime support for all recipients.*

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Cochlear has achieved more world firsts in cochlear implant technology than any other company. Developed from the work of cochlear implant pioneer Professor Graeme Clark, Cochlear continues to make research into hearing solutions its core activity. Today Cochlear is working on more than 90 collaborative research projects in 60 countries around the world.



# A guide to cochlear implant procedure

This summary explains more about what's involved, and will help you to make an informed decision about your child's future. This information should provide a foundation for discussion with your professional medical advisor.

## How it works

A cochlear implant has both internal and external parts.

1. Sound is picked up by a microphone.
2. Sound is sent from the microphone to the speech processor.
3. The speech processor analyzes and digitizes the sound into coded signals.
4. Coded signals are sent to the transmitter.
5. The transmitter sends the code across the skin to the internal implant.
6. The internal implant converts the code to electrical signals.
7. The signals are sent to the electrodes to stimulate the remaining nerve fibres.
8. The signals are recognized as sounds by the brain, producing a hearing sensation.

The speech processor is programmed to your child's individual hearing needs.

The brain receives information within microseconds of the microphone picking up sound, so your child hears sounds as they occur.

## Taking the first step

Your first step is a visit or a call to a cochlear implant centre, to talk to clinicians and doctors about your child's hearing impairment. Specialists at over 550 centres worldwide implant the Nucleus® system and provide extensive service and support to candidates, recipients and their guardians.

To learn more about Nucleus cochlear implants, or to locate a Nucleus implant centre near you, please contact your local Cochlear office or visit our website [www.cochlear.com](http://www.cochlear.com)



Behind the ear – ESprit™ 3G

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[www.cochlear.com](http://www.cochlear.com)

Hear now. And always.



**Cochlear**