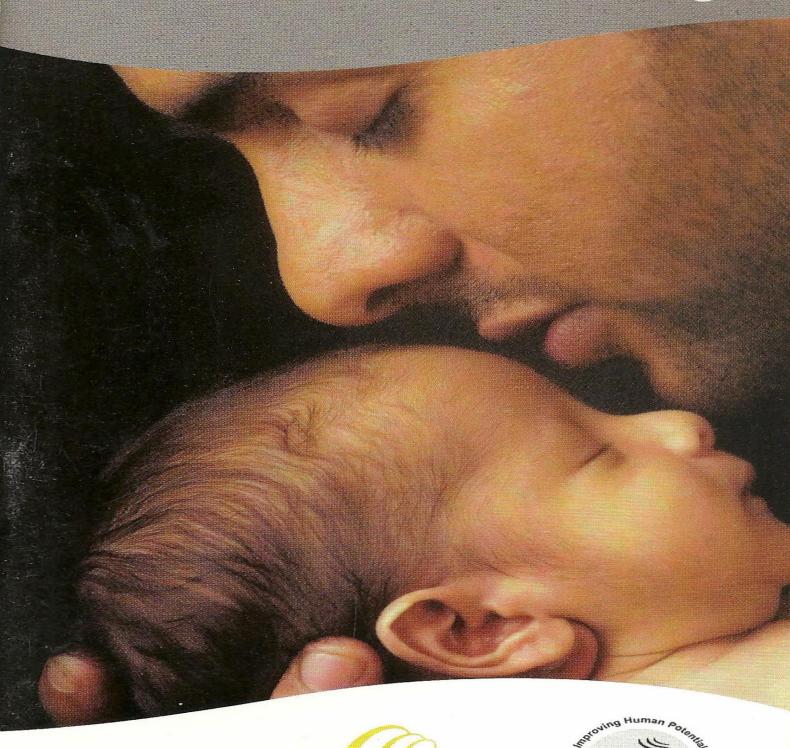
Why does my baby need a hearing test?

A parents guide to early hearing.



Cochlear™



Why does my child need a hearing test?

Hearing loss and deafness is a silent disability which affects over 278 million people worldwide.

The hearing part of the brain starts to develop in the womb and is pre-wired to understand sound. By the time your child says their first word they have been listening to the language that surrounds them for about a year.

In time, your child starts to put meaning to what they have been hearing. The longer your child goes without being able to hear sounds, the more difficult it is to learn spoken language. That's why permanent hearing loss requires early diagnosis and treatment if your child is going to have the best chance of learning to speak.

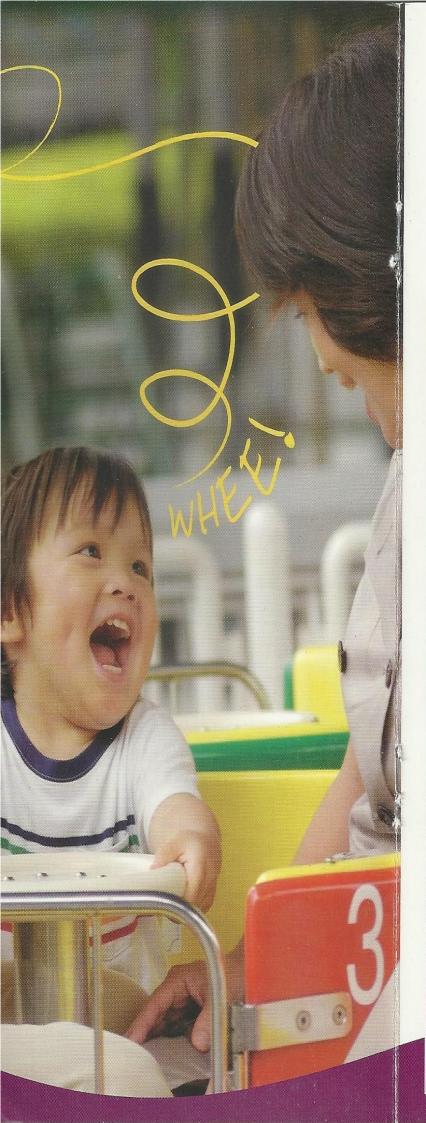
Early hearing is critical

Current research confirms the earlier a child is diagnosed and fitted with an appropriate hearing device, the better their chance of catching up to their hearing peers in listening and speaking.

The development of the hearing part of the brain is very rapid in babies with the most critical time period being from birth to 4 years of age. So it is critically important that your child is gaining access to sound during this short window of time. The brain's flexibility to learn spoken language through listening decreases over time.

In many parts of the world newborn screening for deafness is recommended as best practice ensuring that parents can take the crucial steps in treating their children early. Testing for a hearing loss in newborn babies is a routine and standard test conducted for babies soon after birth in many parts of the world. The test is quick, simply and non-surgical and is completed while your baby sleeps.

We recommend that all parents have their babies hearing tested to ensure they have access to sound. The earlier these tests are performed, the better the opportunities are to provide treatment to children with a hearing loss.



Hearing checklist

It is important to monitor your baby's speech and language development as well as responses to sound.

The following checklist provides a guide to hearing and language milestones. If you are concerned about your child's hearing or speech and language development please arrange to have your child's hearing tested. Your doctor can arrange for a referral to an appropriate location for testing your child's hearing.

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Birth to 3 months	Reacts to loud sounds
	Becomes quieter when hearing familiar voice or sounds
	Makes cooing noises
	Responds to speech by looking at speaker's face
3-6 months	Turns eyes or head toward sounds
	Starts to make speech-like sounds
	Laughs and makes noises to indicate pleasure and displeasure
6-9 months	Babbles, eg 'dada', 'mama', 'baba'
	Shouts/vocalises to get attention
	Will often respond to 'no' and own name
	Responds to singing and music
9-12 months	Imitates speech sounds of others
	Understands simple words, eg 'ball', 'dog', 'daddy'
	Turns head to soft sounds
	First words emerge
12-18 months	Appears to understand some new words each week
	Follows simple spoken instructions, eg 'get the ball'
	Points to people, body parts or toys when asked
	Continually learns new words to say although may be unclear
18-24 months	Listens to simple stories or songs
	Combines two or more words in short phrases, eg 'more food'
2-3 years old	Understands longer sentences
	Listens from a distance (in quiet)
	Follows directions that include 2-3 steps
3-4 years old	Processes complex sentence structures
	Re-tells longer stories in detail – 5 or more sentences

The hearing test

Deafness can be detected in children as early as a few hours after birth with modern non-invasive diagnostic tests such as an Otoacoustic Emissions (OAE) and ABR (Auditory Brainstem Response).

Testing your baby's hearing

Auditory brainstem response (ABR)

This test measures how the brain responds to sound. Clicks or tones are played through soft earphones into the baby's ears. Three electrodes, placed on the baby's head, measure the brain's response to sounds using different pitches or tones.

Diagnostic ABR testing should test low, middle and high-pitched sounds in order to measure how the ear responds to different parts of speech.

Otoacoustic emissions (OAE)

This test measures sound waves produced in the inner ear. A tiny probe is placed just inside the baby's ear canal. It measures the response (echo) when clicks or tones are played into the baby's ears.

These tests are quick and safe for your baby, taking about ten to twenty minutes, the tests are painless, and may be done while your baby is sleeping or lying still. Either or both tests may be used.

What will the hearing test tell me about my baby's hearing?

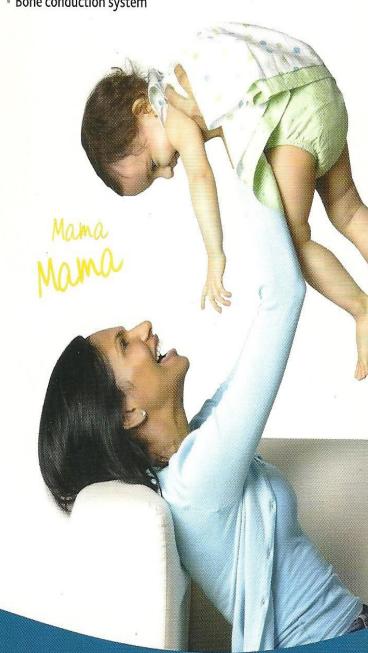
Newborn screening will not give a diagnosis of a permanent hearing loss. It will let you know if your baby should be referred for further diagnostic testing to confirm a hearing loss. It may be reassuring to know that with the right hearing solution most children with a hearing loss are able to successfully develop excellent spoken language that allows them to attend mainstream school and enjoy the same opportunities as their hearing peers.

What are the options available if your baby is diagnosed with a hearing loss?

Continue to communicate and play with your baby as you would if her or his hearing was normal. Your baby is able to respond in many ways to your sounds, eye contact, facial expressions and touch. Comforting, talking, smiling and singing are all forms of communication. Talk to your baby as you feed, change and play, singing children's songs and rhymes will be fun for both you and your baby.

If your child has a hearing loss your options include:

- Hearing aids
- Cochlear implant*
- Bone conduction system



How can I arrange a test?

To arrange to have your child's hearing tested, contact your local Paediatrician or ENT at the nearest clinic or institution.



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materials to neip you through your child's nearing journey:

- Why does my baby need a hearing test? A parent's guide to early hearing – brochure that provides parents with information on hearing tests.
- Hearing loss and your child. A parent's guide to hearing solutions – brochure that provides parents with information on hearing solutions.
- Cochlear™: Answers to your questions brochure that provide parents with information on how cochlear implants work.
- Cochlear™ Baha*: The proven pathway to hearing naturally. brochure that provides parents with information on how Baha systems work.

*Cochlear implants are intended for individuals aged 12 months or over with specific hearing loss indications. Your hearing professional will be able to recommend if this hearing solution will be appropriate for your child.

Hear now. And always

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