

# Children and hearing

# 7



**General information on children's hearing and hearing loss.**



*This is the seventh in a series of brochures from Widex on hearing and hearing-related matters.*

**WIDEX**  
*high definition hearing*

# The importance of hearing

The ability to hear is vital to a child's development. Hearing makes it possible for a child to learn to recognise voices, imitate sounds and develop language. Hearing also helps children pick up danger signals, communicate, develop social skills and orientate themselves. Hearing is more than simply a part of the sensory apparatus; it plays an important role in forming the child's personality and behaviour.



In the past, before it became possible to correctly diagnose a hearing loss in a young child, it was not unusual for a hearing impaired child to be considered as having a learning disability and placed in a care facility. Happily, this does not happen anymore. Hearing loss has nothing to do with a lack of intelligence – but if a hearing loss is not diagnosed and treated at an early stage, it can have a significant negative impact on a child’s development.

It is often the case that parents have more difficulty in coping with their child’s hearing loss than the child does. So it is important that parents strive to be open, positive and well informed, in order to provide the best possible conditions for their child.



# Hearing problems in children

Up to four out of every 1,000 babies are born with some degree of permanent hearing loss. There are many different causes of hearing loss in newborns, including birth traumas and hereditary conditions.

Ear and hearing problems can also develop during childhood. Middle ear infection and noise exposure are among the causes of acquired hearing loss.

About half of all children experience infection and fluid in the middle ear, which can cause temporary or permanent hearing loss. It is important to keep in mind that a child with frequent ear problems can have periodic hearing difficulties. A child's learning ability and behaviour can be affected as a result of these hearing problems, especially during the first years of school.



### **Why is it important to diagnose a hearing loss as early as possible?**

The sooner a child's hearing loss is diagnosed and hearing aids are provided, the greater the chances are that the child can lead a near normal childhood. Our sense of hearing is fully developed at birth and today it is possible to detect hearing problems in a newborn baby. It is a good idea to have a child's hearing tested as early as possible, especially if there are examples of hereditary hearing loss in the family, and there are screening programmes available to identify those children most likely to have a hearing loss at birth.

Studies indicate that, except in cases of profound hearing loss, spoken language development for children with reduced hearing can be comparable to children with normal hearing, if they are provided with hearing aids before the age of 6 months.



# Milestones for hearing development

It is very difficult to define “normal” hearing development. Each individual develops in their own way and at their own pace. The milestones described below are therefore only to be considered as general guidelines.

## **Prenatal stimulation**

The human foetus possesses rudimentary hearing from 20 weeks of gestation. This hearing will develop and mature during the remainder of gestation. The foetus is able to hear sounds from outside the mother’s body, although it can hear low frequency sounds much better than high frequency sounds.





### **0-4 months**

Startled by sudden or loud sounds. Begins to localise sounds with eyes or head movements.

### **3-6 months**

Shows interest in different sounds. Experiments with making own sounds. Seemingly recognises familiar voices.

### **6-12 months**

Babbles. Begins to understand simple words such as "mummy" and "bye-bye". Begins to follow simple instructions.

### **12-18 months**

Words begin to form from the babble. Can use about 20 words and understands around 50 words.

### **2 years**

Can usually speak in simple sentences using a vocabulary of around 200-300 words. Enjoys being read to and can identify and name many things in picture books.

### **3-4 years**

Uses words and sentences to express needs, questions and feelings. Vocabulary, pronunciation and understanding improve markedly during these years.

# Which hearing aid models are suitable for children?

Hearing aids must fit precisely to a child's ears in order to work optimally. Children have special requirements for hearing aids due to the size and physical changes to their ears as they grow. For young children the behind-the-ear (BTE) type of hearing aids are usually recommended because they are more robust, easier to operate and allow more effective daily removal of earwax. New earmoulds will need to be made as children grow and their ear canals change shape.

Hearing aids are available in a variety of bright colours, which most young children prefer. At the time of adolescence, children may prefer more discreet models. This can be a help during teenage years when self awareness of being "different" can be particularly difficult.





### **What can hearing aids do for children?**

Hearing aids can help children with a hearing loss to develop normal language skills and to participate in school and social activities on equal terms with their friends.

Hearing impaired people usually have difficulty distinguishing between speech and noise. This is particularly true with children, as their language is not yet fully developed, making it more difficult to fill in the unheard “gaps” by guessing. So children can benefit greatly from modern hearing aids that are designed to reduce disturbing noise while emphasising the important sounds, such as speech.

If your child has a hearing loss in both ears, it is important that your child is provided with two hearing aids. This bin-aural hearing aid fitting will make it easier for your child to understand speech in noisy situations.

# Noise damages hearing

Children spend much of their time in noisy surroundings such as playgroups, classrooms and playgrounds. Long-term exposure to loud noise can cause temporary hearing loss, which can develop into a permanent loss.

It is important to minimise the amount of time children are exposed to noise. Parents and teachers should make every effort to reduce the noise in children's surroundings in order to create a good, healthy sound environment.

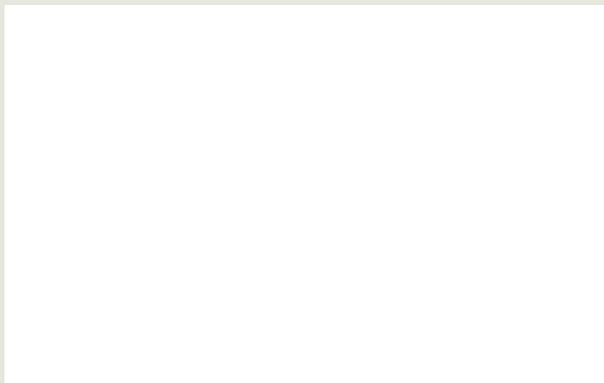
## Help is near

Today there is a wide range of possibilities for helping people with hearing loss to optimise their hearing ability.

At our website [www.widex.com/children](http://www.widex.com/children) you can find more detailed information to help you to be an active, informed participant in the support network providing optimum care for your hearing impaired child.

There is also a part of the website especially for children. In *Fun with Dexi*, the playful little whale Dexi leads children on a hunt for sunken treasure, teaches them about hearing, and much more.





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