

## Hearing Impairment

### I. What is hearing impairment?

Hearing is the ability to perceive sound. A person suffering from hearing impairment has difficulty in perceiving or identifying sound clearly due to auditory problems. The impairment may be unilateral or bilateral. The degree of hearing loss can be classified into five levels as listed below:

Degree of Hearing Loss	Ability to perceive sound
Mild	Difficult to identify soft sound such as whispering
Moderate	Unable to hear clearly what others are saying during conversation. Hearing aids are necessary.
Moderately-severe	Unable to clearly hear loud noises such as telephone ring
Severe	Can only hear very loud noises and sounds such as shouting or vacuum cleaner noise
Profound	Difficult to perceive any sound

### II. What are the symptoms of children with hearing impairment?

#### During infancy:

1-3 months old	No response to sudden sound such as banging of door or ringing of doorbell.
4-6 months old	Unable to locate the sound source.
7-9 months old	Do not look at the person being mentioned, e.g. "Where is Uncle Tom?"
10-12 months old	No response to their names being called or frequently used words or phrases, e.g. "No".

#### During childhood:

- Delayed response to sound
- Cannot hear clearly what others are saying
- Show difficulty in locating the sound source
- Pay more than usual attention to speakers' facial expression and lip movement while listening
- Give irrelevant answers or misinterpret instructions
- Request for repetition during conversation
- Show poorer ability to understand speech in a noisy environment
- Tend to turn up the sound volume of television
- Incorrect pronunciation
- Delayed language development
- Poor attention in class
- Frequent use of gestures to express themselves, e.g. pointing to what they want
- Easily irritated as a result of communication difficulty

\* Parents should be alert to the possibility of hearing impairment if their child shows the above signs, and seek medical advice as soon as possible.

### III. What causes hearing impairment?

<b>Congenital factors</b>	<b>Acquired factors</b>
<ul style="list-style-type: none"><li>• Heredity</li><li>• Viral infection during pregnancy, e.g. rubella infection</li><li>• Congenital defects such as anomalies of the ear, nose or throat</li><li>• Premature birth, birth asphyxia, excessive bilirubin, etc.</li></ul>	<ul style="list-style-type: none"><li>• Excessive earwax</li><li>• Eardrum perforation</li><li>• Middle ear effusion or infection</li><li>• Otosclerosis or ear ossicle dislocation</li><li>• Sequelae of childhood diseases such as measles and meningitis</li><li>• Head or ear trauma</li><li>• Prolonged exposure to loud noise</li><li>• Medication that may lead to hearing damage</li></ul>

### IV. How does hearing impairment affect children's development?

#### **Language**

- Delayed language development with unclear speech and incorrect pronunciation.

#### **Emotion and behaviour**

- Easy to have emotional and behavioural problems as a result of difficulties in verbally expressing himself/ herself

#### **Self-confidence**

- Lack of self-confidence with poor self-image for being always mistaken to be slow in response

#### **Social interaction**

- Socially excluded by peers due to poor comprehension and expression, or actively avoid social contact and communication

#### **Academic performance**

- Academic performance being affected due to difficulty in receiving the correct messages

\* The impact of hearing impairment on the child is determined by a variety of factors. Generally speaking, early treatment and training can help to minimize the developmental problems caused by hearing impairment.

### V. Can hearing impairment be cured?

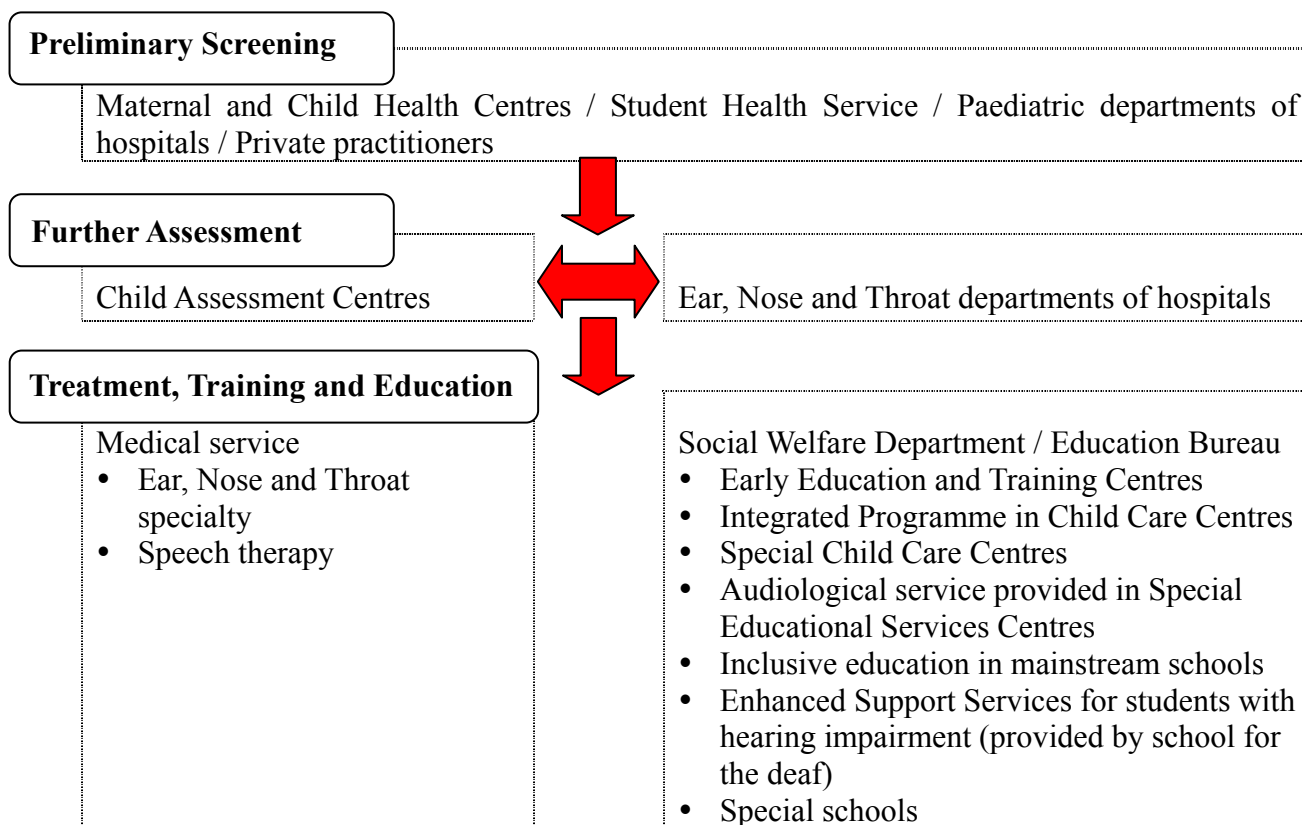
This depends on which part of the auditory system is affected.

If the impairment is incurable, the child may need to use a hearing aid or receive a cochlear implant, depending on the nature of the lesion. With the help of appropriate auditory and speech training, even children with severe hearing impairment could gradually show improvement in response to sound.

## VI. How can children’s hearing be protected?

- Cover the ears in noisy environment, such as construction sites where pile drivers are used, and avoid staying in such places for too long
  - Do not shout directly at children’s ears
  - Do not play loud music to the child for prolonged periods
  - Do not bottle feed infants lying on their backs to avoid backflow of milk into the nasopharynx, leading to otitis media
  - Be careful in the use of prescription drugs
  - Seek immediate treatment in case of high fever or upper respiratory tract infection
  - Do not hit or slap children on their ears. Avoid picking ears or putting foreign objects into ear canals
- \* Those with family history of congenital hearing impairment should seek genetic counselling.
- \* Women should ensure that they have received rubella vaccination before pregnancy.

## VII. Where can parents seek help if their child is suspected to have hearing impairment?



## VIII. How can parents help their child with hearing impairment?

- Understand and accept the developmental progress of the child
- Provide timely fitting of hearing aids or cochlear implants as appropriate
- Train the child to make good use of his/her residual hearing
- Allow more time when communicating with the child

## Enquiry Numbers and Related Websites

### Government Bureau / Departments

- Department of Health

Child Assessment Service

2246 6633

[www.dhcas.gov.hk](http://www.dhcas.gov.hk)

Family Health Service

2961 8855

(Maternal and Child Health Centres)

[www.fhs.gov.hk](http://www.fhs.gov.hk)

- Social Welfare Department

2343 2255

[www.swd.gov.hk](http://www.swd.gov.hk)

- Education Bureau

(24-Hour Hotline)

2891 0088

Special Education & Special Schools

<http://serc.edb.gov.hk>

Special Education Resource Centre

### Other Organisations

- Hospital Authority

(General Enquiry)

2300 6555

[www.ha.org.hk](http://www.ha.org.hk)

- Hong Kong Society of Audiology

[www.audiology.org.hk](http://www.audiology.org.hk)

- Hong Kong Society for the Deaf

2527 8969

[www.deaf.org.hk](http://www.deaf.org.hk)

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