



# Hearing Impairment

# **What is Hearing Impairment?**

Hearing impairment refers to a defect or damage to the hearing mechanism which may occur in any part of the ear. It leads to hearing disability or loss of hearing which may range in severity from mild to moderate to profound.

# Definition

Hearing impairment is when an individual loses the ability to hear in either one or both ears. The level of impairment can vary from mild to severe or total loss of hearing.

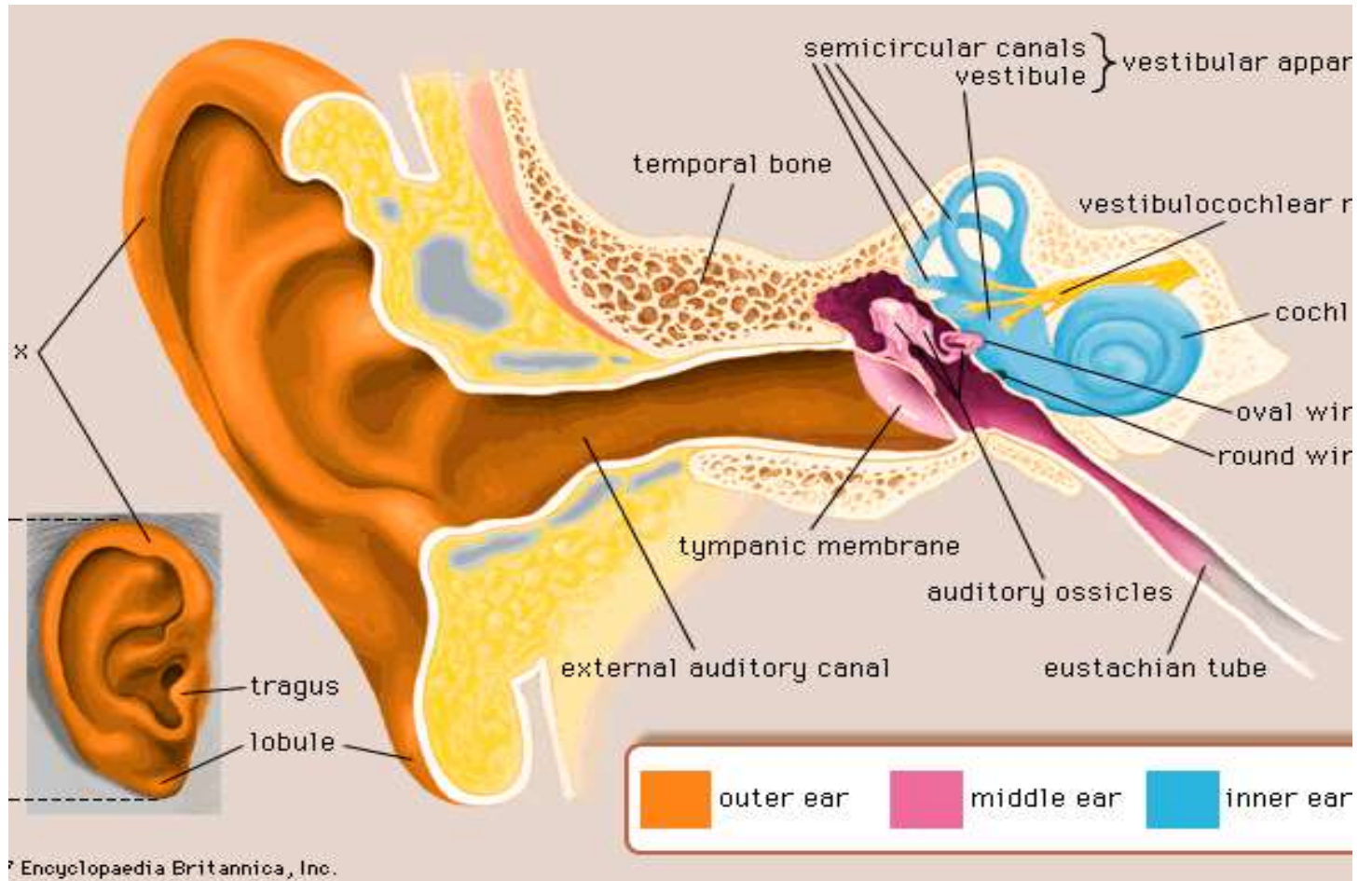


# IDEA

The Individuals with Disabilities Education Act defines deafness and hearing impairment as follows: “Deafness means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, [and] that adversely affects a child’s educational performance.... Hearing impairment means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child’s education performance but that is not included under the definition of deafness...” (Heward, 2009).

# Hearing Impairment-

- The hard of hearing child
- The deaf child
- The in- between child



# **2 Types'' based on site of physical origin**

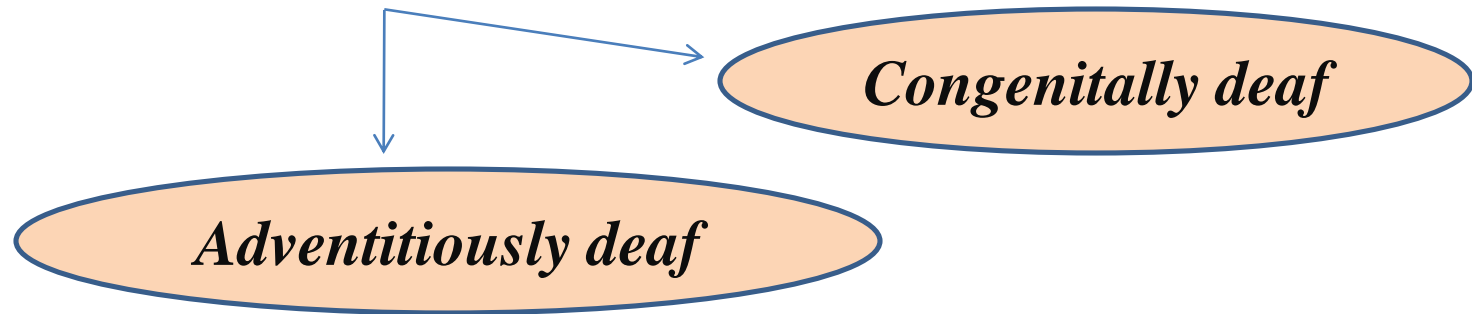
There are two types of hearing impairment: one is called conductive hearing impairment which is when the outer or middle ear is damaged. This can be medically treated. The second is sensorineural and this is when there is damage to the inner part of the ear. In most cases, this is irreversible and cannot be healed.

# Classification of Hearing Impaired:

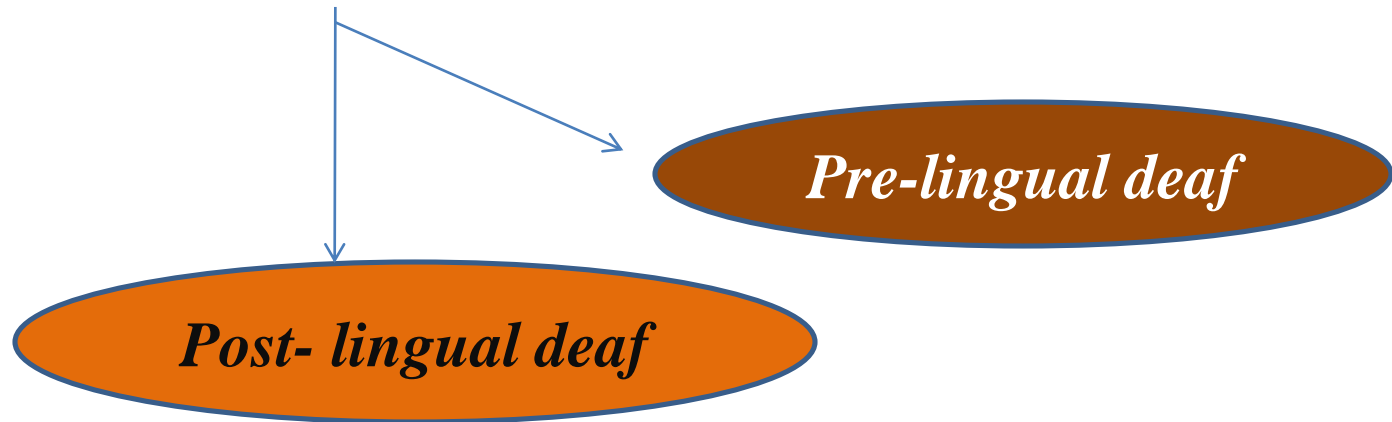
- Based on degree of hearing loss-
  - **Mild** (*db 26-40*)
  - **Moderate** (*db 41-55*)
  - **Severe** (*db 56-70*)
  - **Profound** (*db 71-90*)
  - **Near total deafness** (*db 91 and above*)
  - **Total deafness** (*No Hearing*)



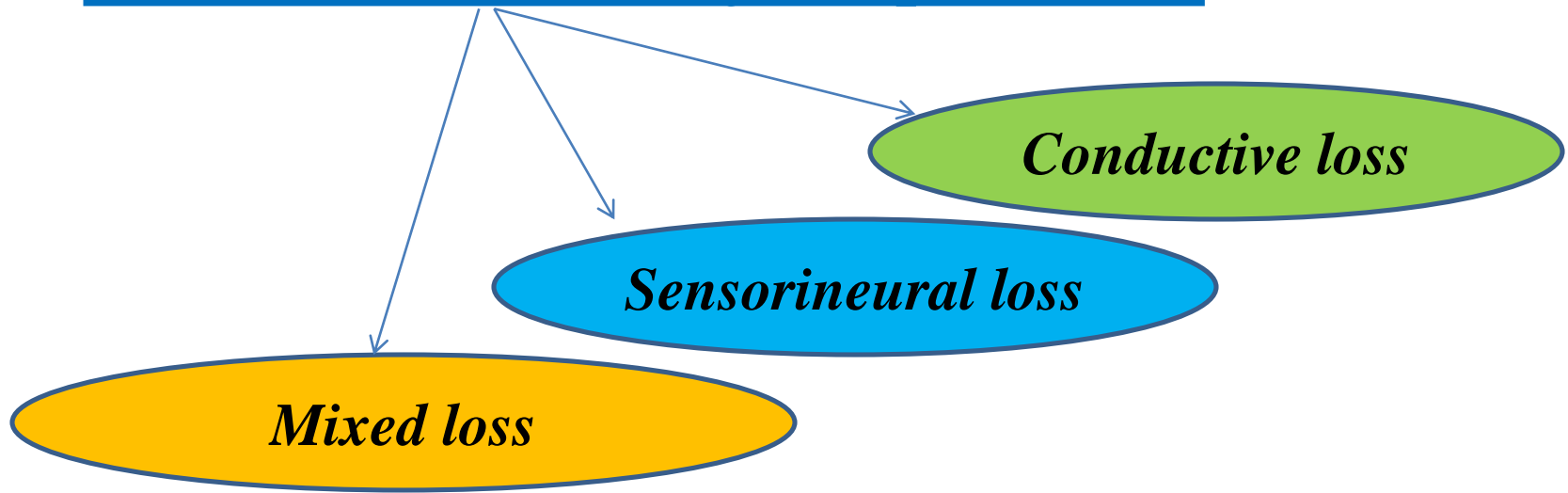
- *Based on age of onset-*



- *Based on language experience-*



- Based on location of the problem-



- Central deafness

# Characteristics



- Difficulty following directions and instructions
- Difficulty with interpersonal skills
- Language delay
- Easily frustrated leading to behavioral difficulties
- They use American sign language as their first language

# Characteristics Cont.

- Difficulty with speech, reading and writing skills
- Often struggle with reading and writing because sign language is their first language, so English is a second language for them
- Socially, deaf culture varies. “Big D” deaf people usually only socialize with others who are deaf. “Small d” deaf people try to identify with those who are not deaf. Cochlear implants are accepted by the “small d” deaf community and shunned by the “big D” deaf community.

# Characteristics of Hearing Impaired children-

- Language and speech development.
- Intellectual ability.
- Academic achievement.
- Social and occupational adjustment.

- **Cultural Characteristics**

- The Deaf community is a distinct culture.
- Uses ASL as a primary means of communication
- Identify themselves as part of the Deaf community

- **Intellectual Characteristics**

- No significant differences in perception , learning, and memory between hearing children and those who are deaf

- **Academic Characteristics**

- Achievement scores are lower than for hearing peers, but assessment issues may affect these scores.
- Reading comprehension
- Written language
- Mathematics
- Speech and language

- **Speech and Language Characteristics**
  - Spoken language may be delayed.
  - Can attain intelligible and age-appropriate speech
  - May have language delays
  - ASL may be the child's natural language and may best prepare child for later learning of English language skills
- **Social/Emotional Characteristics**
  - Social-emotional skill development

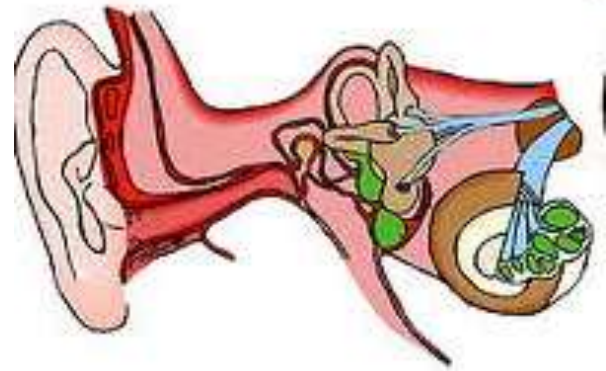


# Causes of Hearing Impairment-

- *Long-term exposure to environmental noise*
- *Genetic*
- *Disease or illness*
- *Medications*
- *Physical trauma*

# Causes

- Inherited
- Premature birth
- Certain conditions during birth like lack of oxygen to breath
- Conditions during pregnancy such as rubella, syphilis, and other infections
- Jaundice and other infectious diseases.
- Certain drugs can cause deafness
- Head injuries
- Excessive loud music
- Old age, to name a few



- **Heredity and genetics: (most common cause)**
- – Cleft Palate:
- – Cytomegalovirus:
- – Down syndrome
- – Herpes Simplex virus
- – Hyperbilirubinemia

- Heredity & genetics
- • Meningitis
- • OtitisMedia
- • Noise

- Syphilis -Sexually transmitted bacterial infection
- – Toxoplasmosis-
- • by a parasite contracted by the mother and passed on to

- the developing fetus
- – Treacher-Collins syndrome- genetic defect
- – Usher syndrome - genes altered or mutated in hearing related systems
- –

- Waardenburg syndrome - genetic defect that may result
- in hearing loss and changes in skin and hair pigmentation
- accumulation of fluid behind the eardrum and
- interrupts the process of hearing
- **Meningitis: 2nd most common cause for deafness**
  - – Brain infection that affects the central system
- **Otitis Media:**
  - – is an infection of the middle ear that results in an

**Care and training of  
the hearing impaired**



# Care and Training of Hearing Impaired-

## Parent's responsibility –

- Early identification of hearing impairment
- Timely referral of cases.
- Acceptance of the impaired child.
- Sharing responsibility for training of the child.
- Encouraging the child to use hearing aid regularly.
- Preparing the child for integration in the school.

- ***School's responsibility-***

Three methods of training deaf children-

**1. The oral method**

- *Finger spelling*
- *Sign language*

**2.The manual method**

- *Lip reading*
- *Auditory training*

**3. Total communication method.**



# **Role of teachers in managing hearing impaired children-**

- **Advise parents for medical treatment of the child.**
- **Attend short term training to know and adjust with the implications of the handicapped.**
- **Develop positive attitude.**
- **Keep auditory and visual distracters to the minimum.**
- **Ensure proper seating arrangement in class.**
- **Ensure use of the hearing aids.**
- **Encourage questions.**
- **Adapt curriculum to needs of the child.**
- **Give opportunities of equal participation in class.**

- Take an interest in the student/s.
- -Learn what works best for each individual
- -Understand what they need to be successful
- -Familiarize yourself with their IEP
- Communication and Language
- -Talk with the special ed. Teacher
- -Parents are usually a great resource  
(McNeil & Chabassol, 1984)
- -Utilize interpreters when you can
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- -Learn sign language, or at least the basics (Heward, 2009)
- Trainings/Education
  - -Attend trainings or classes to learn about hearing impairments (McNeil, M. & Chabassol, D.J. 1984)
  - -Utilize professional development and collaborate with other teachers
- Instruction
  - -Modify instruction and use various strategies; i.e., small group, independent, large group work (Andrews, 1995)

- Provide preferential seating for the student
- By providing preferential seating to the student, I ensure they have a stronger chance of following instruction
- The student will be able to maintain eye contact with me, and if they need to read lips, it will be easier for the student
- Modify Instruction
- When I show videos, I need to make sure there are subtitles or it is closed captioning

- When I use music, provide lyrics for the student
- Use visual aids when possible
- Utilize available services and resources
- By using the available services – such as an interpreter – it allows for a greater chance for the student to be successful

- Differentiate Instruction
- Using a variety of instructional strategies will benefit the student and inform you of ways in which the student learns more effectively
- Communicate
- Be in constant communication with special education teacher and cooperating teacher to establish goals
- Have open dialogue with parents to discuss their expectations as well as mine
- Learn sign language