

Hearing impairment

Hearing loss (also called hearing impairment) makes it hard to hear or understand sounds. This happens when there is a problem with one or more parts of the ear, the nerves coming from the ears, or the hearing part of the brain. Some people are born with hearing loss or may be due to improper development, damage or disease to any part of the hearing mechanism. Hearing is a prerequisite for the development of normal speech & language.

The three basic categories of hearing loss are **sensorineural hearing loss**, **conductive hearing loss**, and **mixed hearing loss**. Many individuals who are deaf or hard of hearing prefer the terms "deaf" and "hard of hearing," because they consider them to be more positive than the term "hearing impaired," which implies a deficit or that something is wrong that makes a person less than the whole.

According to WHO, Over 5% of the world's population, or 430 million people require rehabilitation to address their 'disabling' hearing loss (432 million adults and 34 million children). It is estimated that by 2050 over 700 million people or one in every ten people will have disabling hearing loss. Over 1 billion young adults are at risk of permanent, avoidable hearing loss due to unsafe listening practices.

A person who is not able to hear as well as someone with normal hearing – hearing thresholds of 20 dB or better in both ears – is said to have hearing loss. 'Hard of hearing' refers to people with hearing loss ranging from mild to severe to profound. These people usually communicate through spoken language and can benefit from hearing aids, cochlear implants, and other assistive devices as well as captioning.

'Deaf' people mostly have profound hearing loss, which implies very little or no hearing. It makes it difficult to learn how to speak. They often use sign language for communication. Other means of sensory substitution, such as speech reading, use of print on palm or Tadoma, signed communication.

To honor and celebrate these brave souls who go through mental and physical challenges to overcome their limitations is celebrated every year in the month of September. It is celebrated as **World Deaf Awareness month** worldwide. 23rd September is officially recognized as **International Sign Languages day** by the United Nations. It helps spread awareness regarding safe practices to preserve the hearing ability, different kinds of sign languages and share resources related to hearing impairment for better understanding.

The technology to develop hearing aids is getting advanced by every passing year. There is a range of assistive devices, software, mobile applications, and hearing aids that make the lives of hard-of-hearing people a little easier. It empowers them to lead their lives normally without falling behind in their overall progress.

The ability to hear is the ability to think, understand and act!

It is very important to support their needs using our ideas and innovation. An annual additional investment of less than US\$ 1.40 per person is needed to scale up ear and hearing care services globally. The market is growing but there is still a lack of knowledge for hearing aid instruments and many people are unable to access the opportunity because of the costly offered solutions. According to our recent study as part of the VOSAP research internship about trends in assistive technology, the global hearing aids market is expected to rise from 4.7 billion USD in 2015 to 7 billion by the year 2026.

Here are some examples of some of the leading tech companies and a variety of available hearing aids in the market.