

## 3. Sensory Considerations for Learners with Visual & Hearing Loss, Multisensory Learning

### 3D: Causes of Hearing Conditions

# Causes of Hearing Condition

## Hearing condition can be:

- Congenital, which means that the loss was present at the time of birth or
- Acquired which means that the loss is acquired after birth.
- **Congenital hearing loss** may be caused by genetic factors, i.e. one parent carries the gene for hearing loss; or linked to genetic syndromes where hearing loss is a characteristic e.g. Downs Syndrome or Usher Syndrome.

## Other causes of congenital hearing loss include:

- In utero infection i.e., rubella
- Prematurity
- Toxemia during pregnancy i.e. Fetal Alcohol Syndrome
- Cleft Palate

## Causes of Hearing Condition

- **Acquired hearing loss** can be the result of disease, infection or injury. These could include otitis media, meningitis, measles or a head injury.
- There are various more common causes of hearing loss in school-aged learners, and these include - otitis media, glue ear, chronic otitis media, damaged ossicles & perforated eardrum.



# Otitis Media

## What is this?

This is an inflammation/infection of the middle ear.

## What causes this?

This may be a viral or bacterial infection, from the nose/throat via the eustachian tube, treated with antibiotics if bacterial in origin. Learners with otitis media have reduced hearing, as a result of the buildup of fluid in their middle ear impedes the movement of the small bones (ossicles) within the ear. This level of hearing may fluctuate.

## What does this mean for the learner in my class?

Learners with otitis media may experience difficulties with:

- Reduced intensity of sound
- Constant earache/feeling of 'pressure' in the ear
- Dizziness/vomiting
- Reduced hearing may persist for some time following inflammation/infection

# Chronic Otitis Media

## What is this?

This is persistent repetition of otitis media, where a perforation of the ear drum is possible leading to the discharge of fluid. Frequent repetition may mean a permanent perforation of the ear drum.

## What causes this?

This may be a viral or bacterial infection, from the nose/throat via the eustachian tube, treated with antibiotics if bacterial in origin.

## What does this mean for the learner in my class?

Learners with chronic otitis media may experience difficulties with:

- Reduced intensity of sound
- Constant earache/feeling of 'pressure' in the ear
- Dizziness/vomiting
- Reduced hearing may persist for some time following inflammation/infection



# Damaged Ossicles

## What is this?

The ossicles are the small bones in the middle ear which may be damaged, or misshapen.

## What causes this?

Damage may be caused by infection, a collapsed ear drum or injury. This results in the passage of sound being disrupted from the outer to the inner ear. Ossicles can be reconstructed by surgery.

## What does this mean for the learner in my class?

Learners with damaged ossicles may experience difficulties with:

- Reduced hearing
- Dulled sounds

# Perforated Ear Drum

## What is this?

A perforated ear drum means the membrane which covers the ear drum is torn.

## What causes this?

This may be caused by repeated and chronic otitis media, sudden excessive noise or physical damage i.e. an object being poked into the ear.

## What does this mean for the learner in my class?

- A perforated ear drum doesn't capture effectively the sound vibrations
- Hearing may be dulled or distorted
- Reduced hearing may persist for some time following chronic otitis media