

# What is Audiology?

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# About Me

- B.S. in Biological Science from California State University, Fullerton
- Au.D from Northwestern University
- Brother and cousin with hearing loss





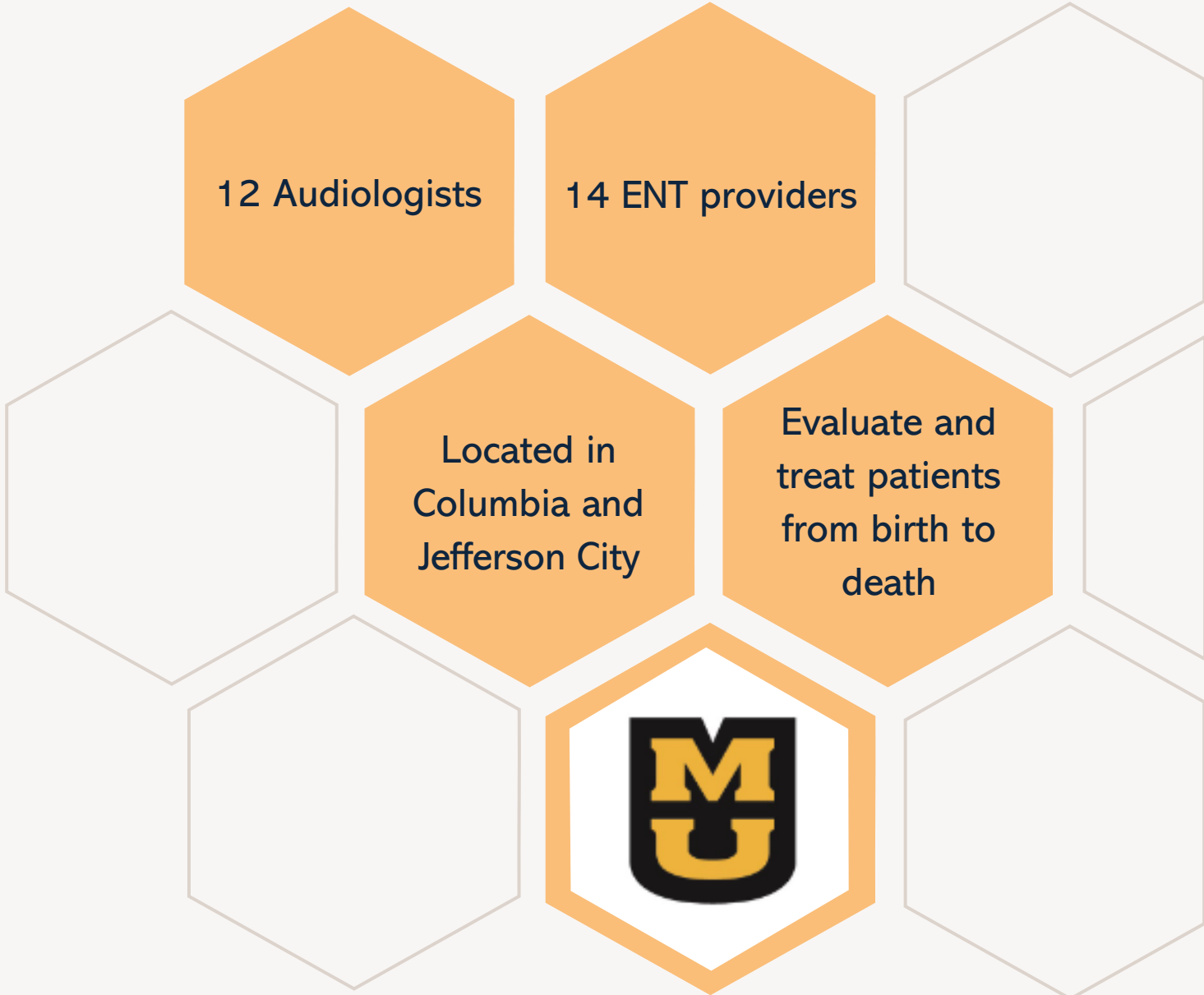
# Scope of Practice

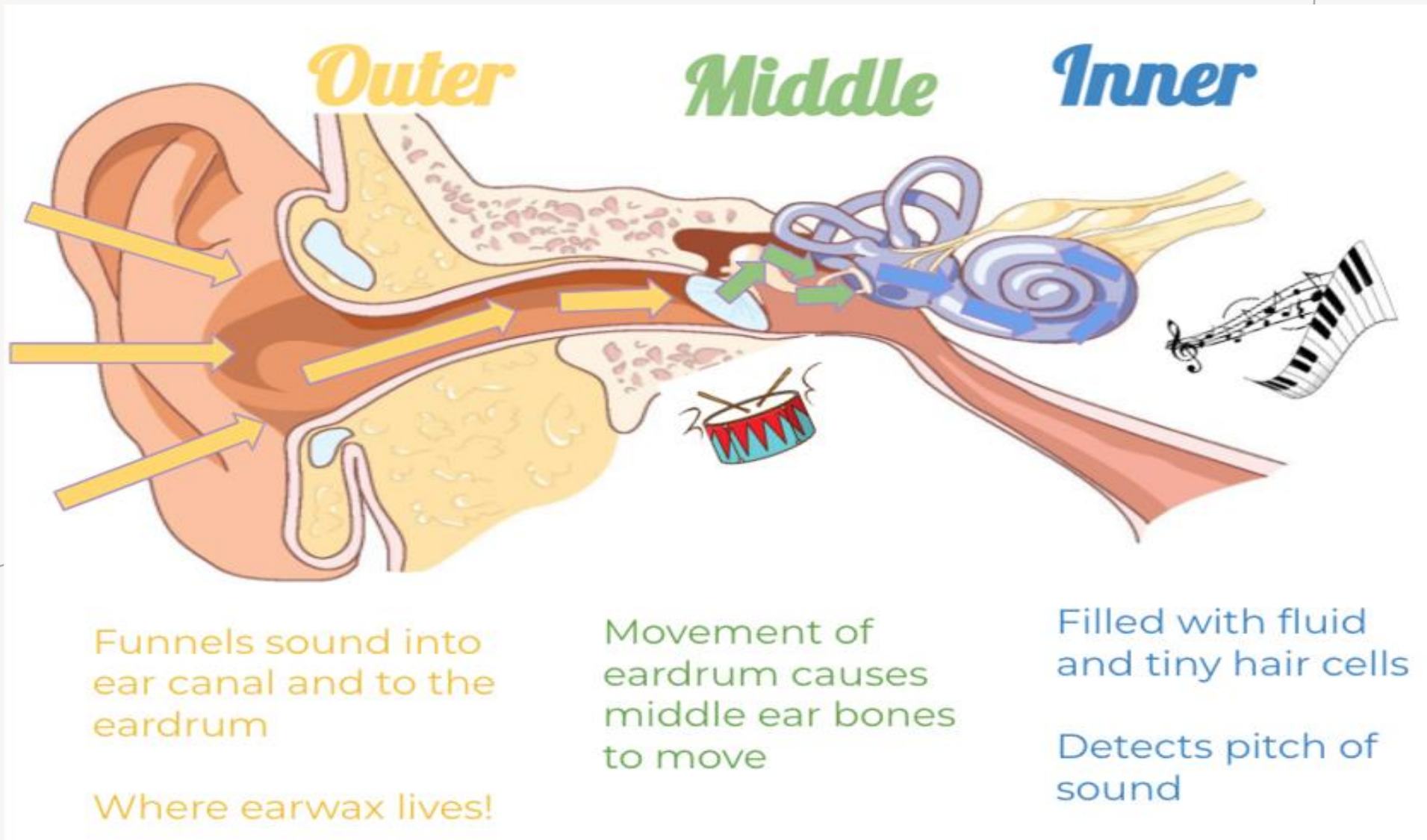
Presentation Title





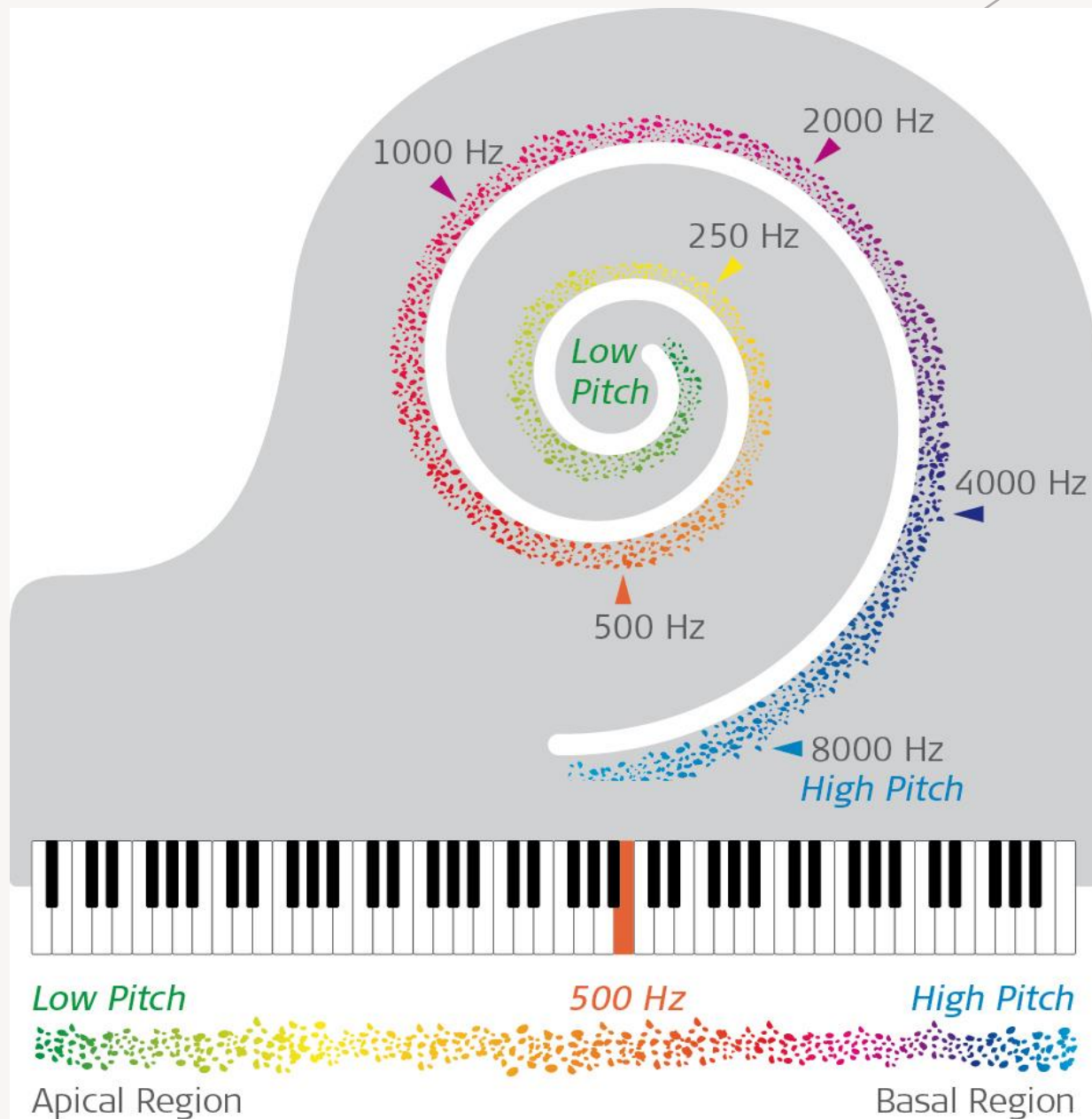
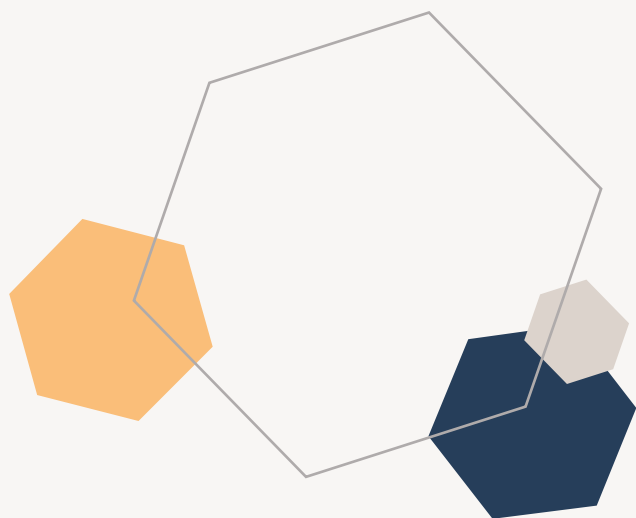
# MU ENT Hearing and Balance



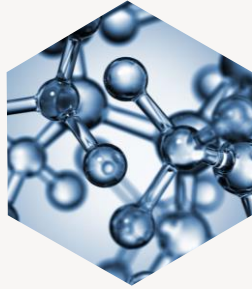


# Hearing can affect cognition and quality of life

PCP vs ENT vs AuD



# Causes of Hearing Loss



## Genetics

Universal Newborn Hearing Screenings and regular school screenings



## Abnormal growths/tumors

Not always associated with pain or other symptoms



## Ear Infections/Wax Buildup

Do NOT use Q tips!



## Secondary to illness

Meningitis, Rubella, Scarlet Fever, etc.



## Age

25% of adults age 65-74 and 50% of adults older than 75 have hearing loss



## Sudden Hearing Loss

Considered a medical emergency, see a specialist immediately!



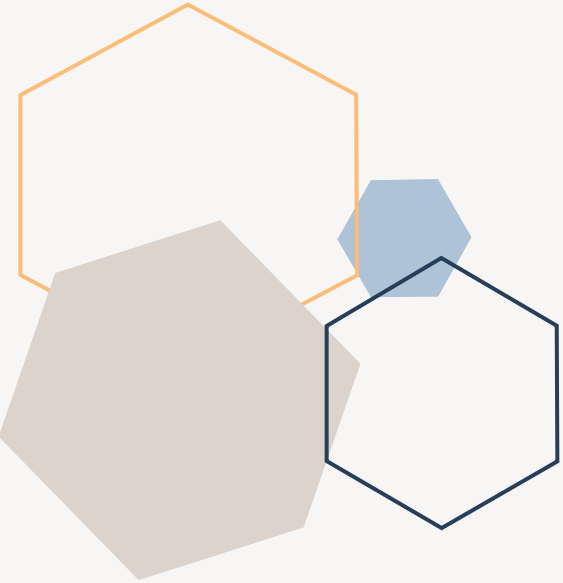
## Trauma

Ruptured Ear Drum, head trauma, etc.

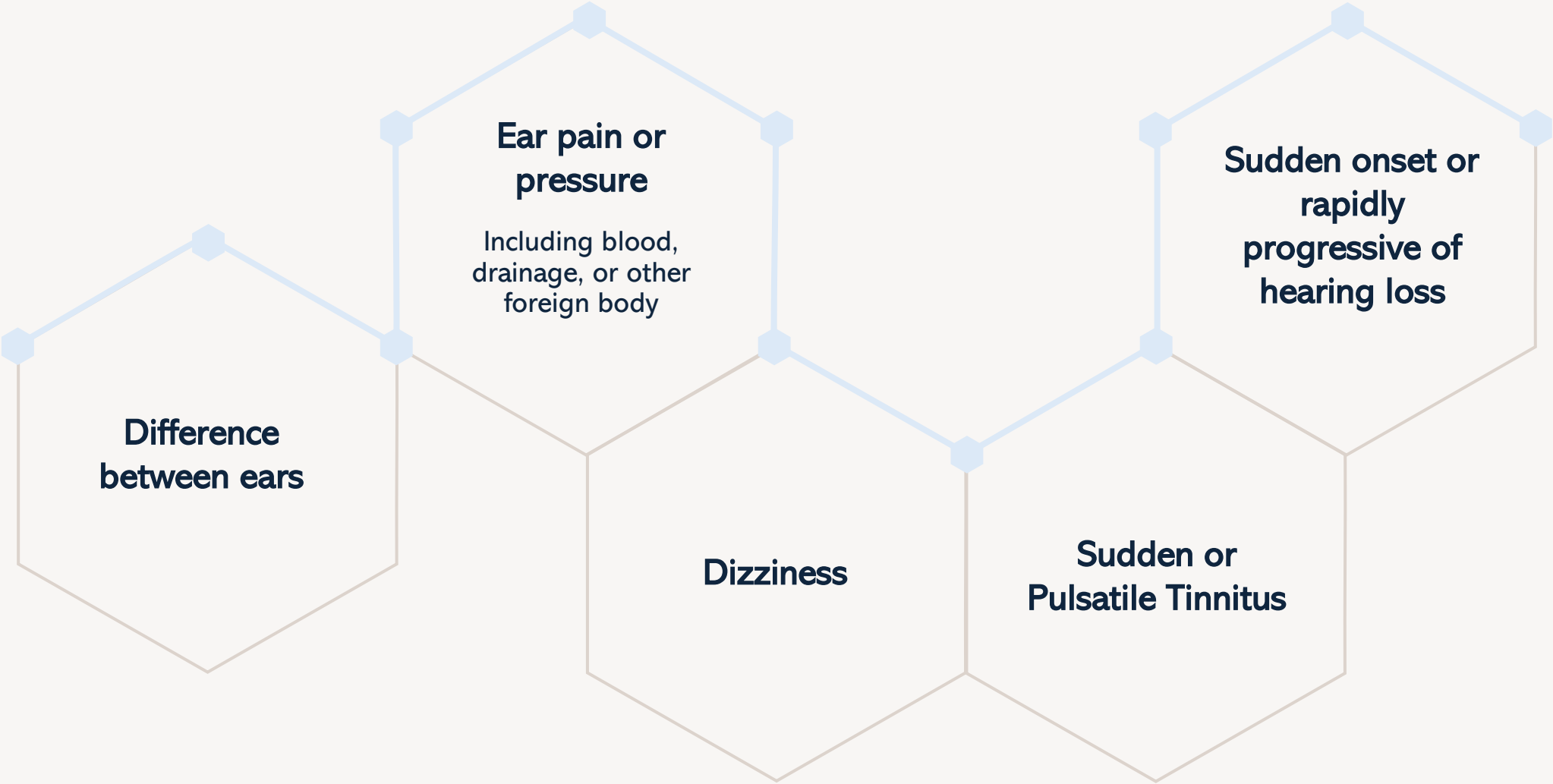


## Noise Exposure

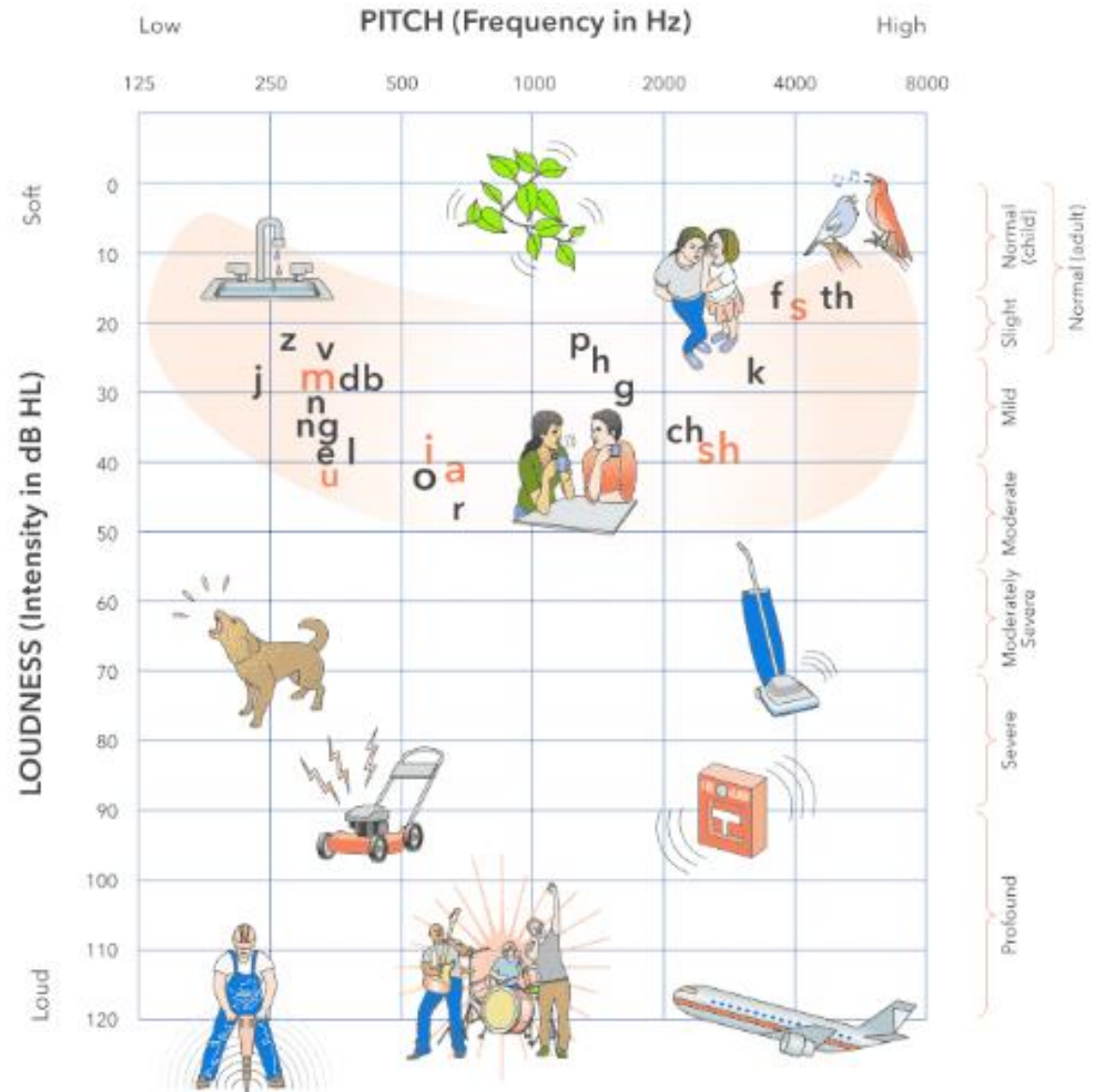
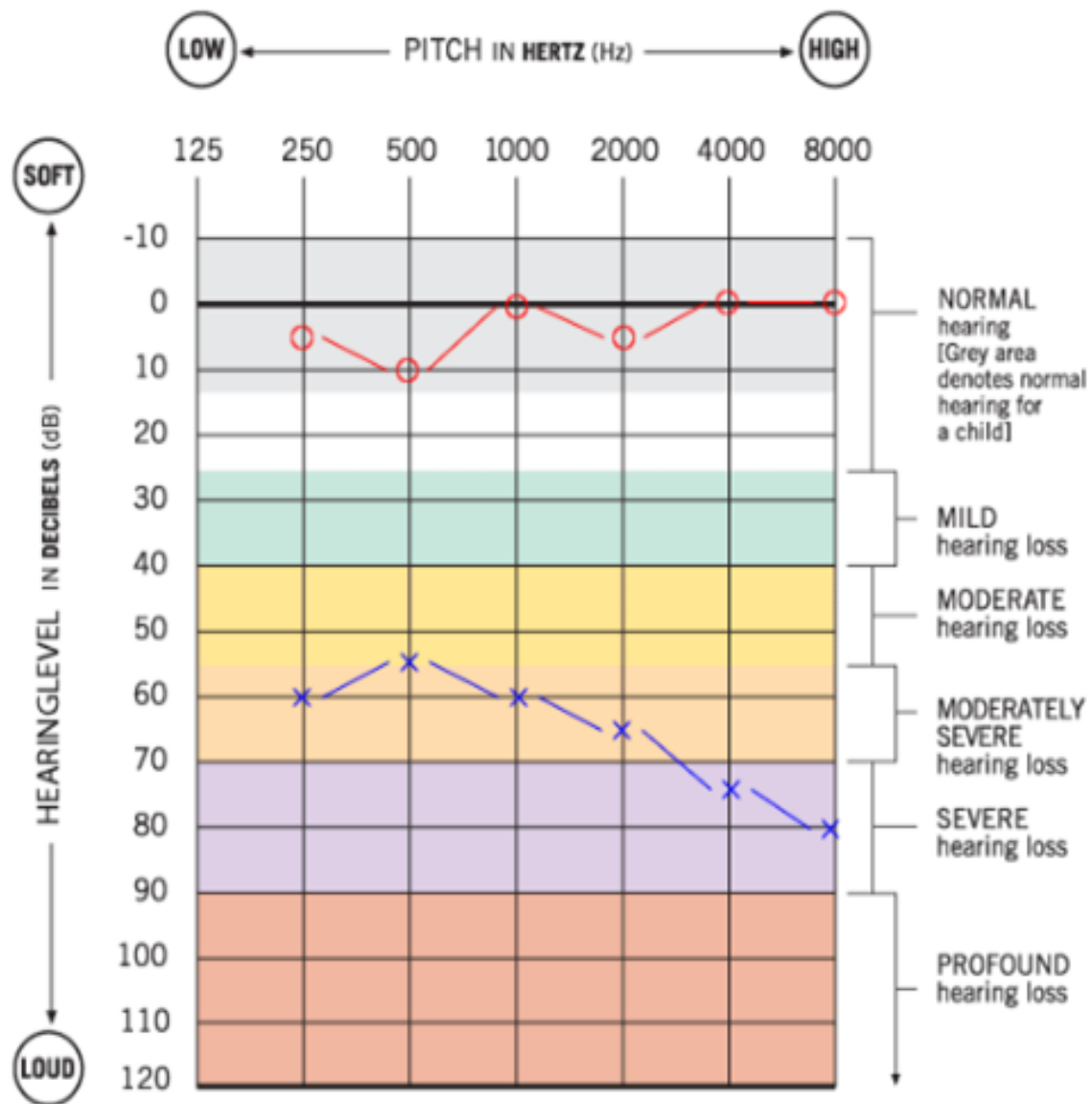
Wear your hearing protection!



# Audiology Red Flags

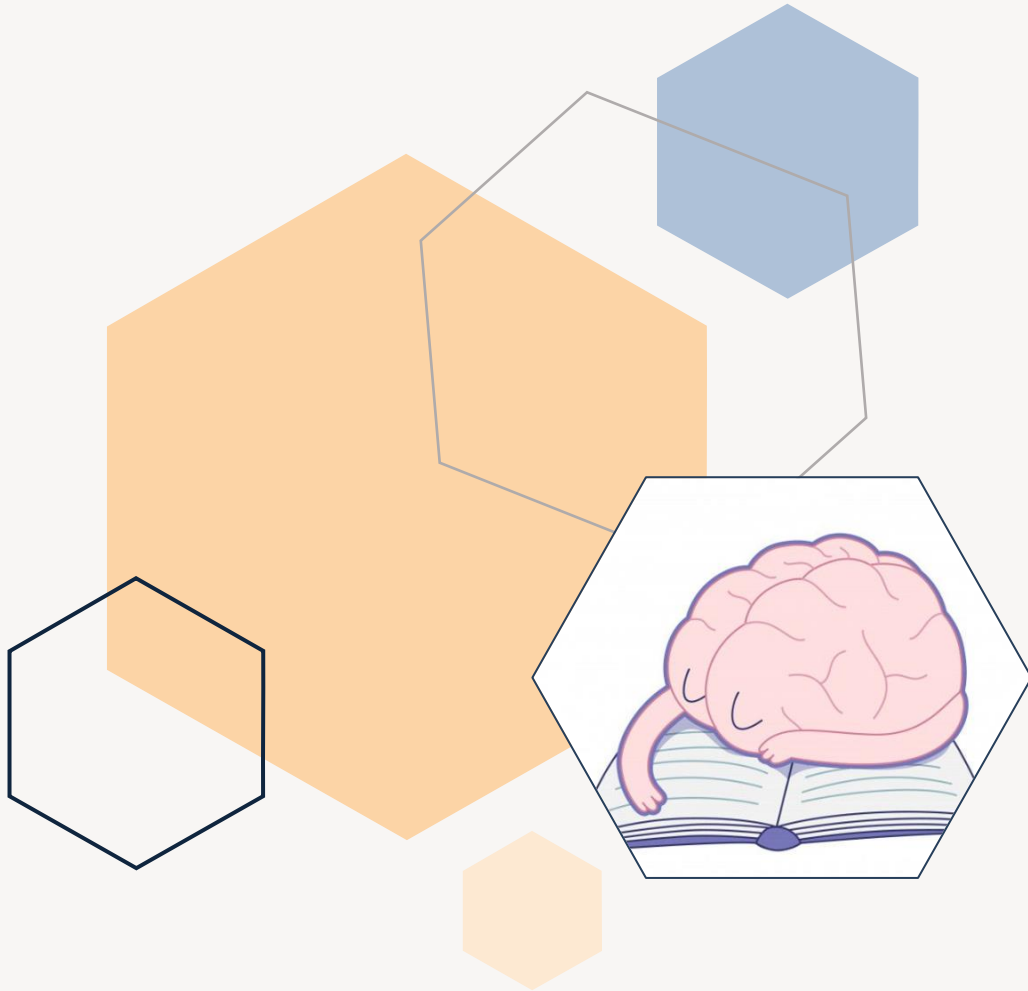






# Listening Effort

- Reduced ability to encode complex signals
- Increased difficulty tracking fast-changing components of sound
- Distorted representation of speech sounds
- Less accurate ability to read lips/process visual cues



# Communication Strategies

## For the Speaker

Slow your rate of speech

Get someone's attention before you talk

Walk before you talk

Repeat

## For the Listener

Visual Cues/ Lip Reading

Eliminate/ put the background noise behind you

ALDs, closed captions

Advocate for yourself and your hearing loss/ repeat what you heard



# Amplification



**Hearing Aids**



**Osseointegrated device  
/ Bone Anchored  
Hearing Aid (BAHA)**



**Cochlear Implants**

# Tinnitus

Stress

Dental/  
Cardiovascular  
Issues

Hearing Loss

Acoustic  
Neuroma

Side Effects of  
Medications

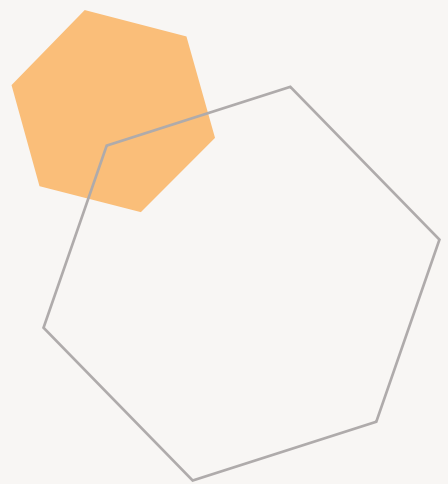


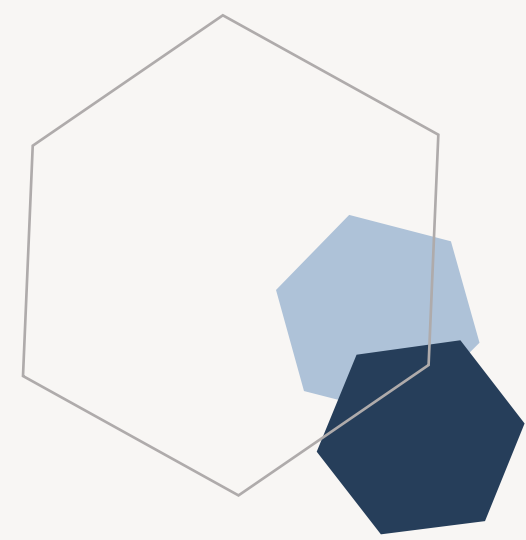
Noise Exposure

Outer/Middle Ear  
Issues

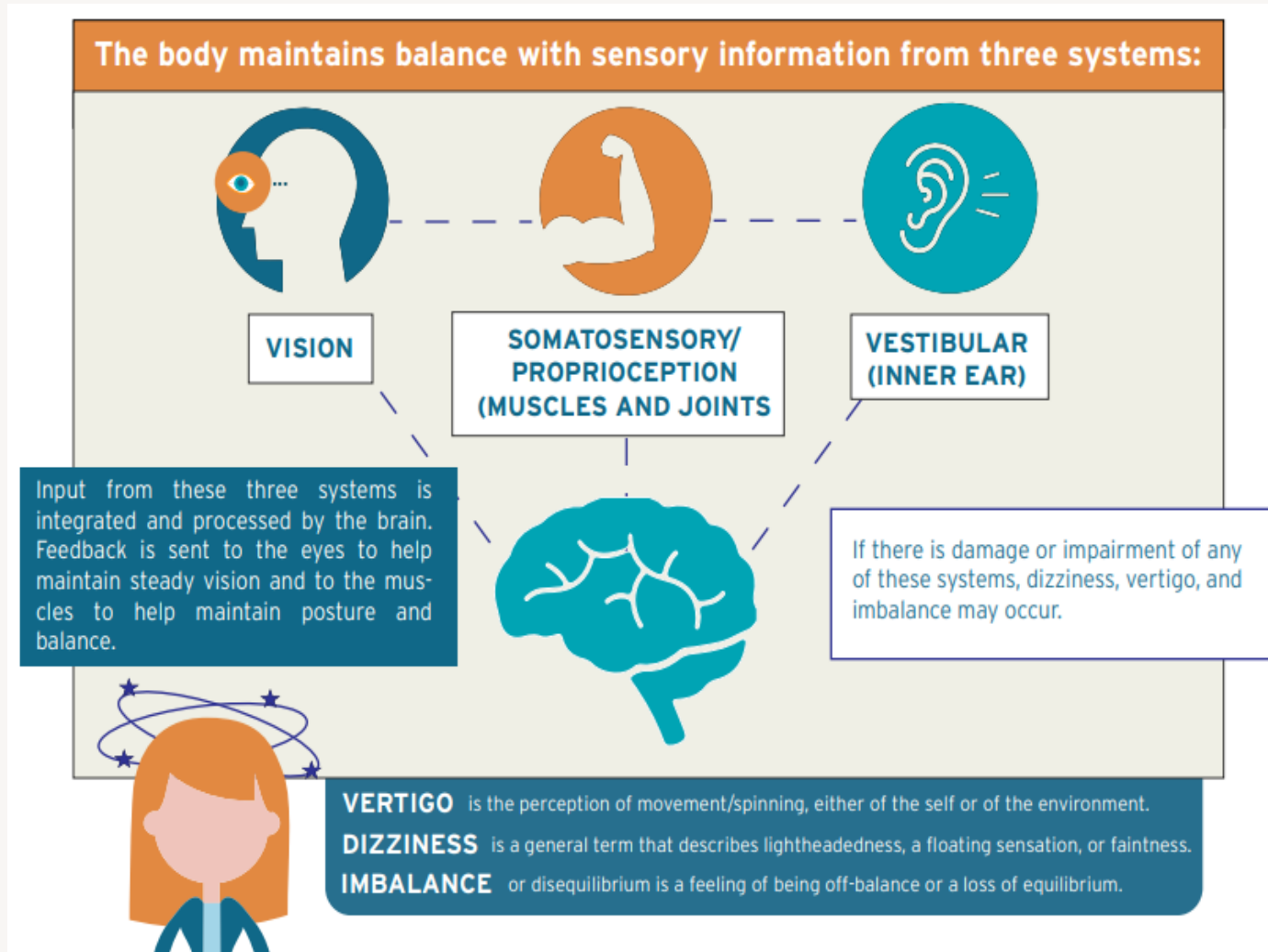


# How do we treat tinnitus?

- Amplification/Hearing Aids
  - Medical/Medication management
  - Diet restrictions (caffeine, alcohol, salt)
  - Sound Therapy (apps, white noise machines)
  - Stress management/meditation
  - Cognitive Behavioral Therapy
  - Tinnitus Journal
- 



# Balance Disorders



- Can be related to hearing loss
- On average, patients see 4-5 doctors before receiving a diagnosis related to their balance

A decorative graphic on the left side of the slide consists of several hexagons. There is a large orange hexagon in the center, a smaller blue hexagon above it, a white hexagon with a black outline to its left, and a small light orange hexagon below it.

# Pop Quiz

Name 3 communication strategies

Name 2 treatments for tinnitus

What is the purpose of the cochlea?



# Summary

- Annual Hearing Tests are recommended, especially if you have a known history or hearing loss, noise exposure, or other ear issues (Covered by Medicare)
- Our ears are responsible for hearing and balance, so it is important to take care of them. Wear hearing protection when necessary
- On average, it takes people ~ 7 years from the time they are diagnosed with hearing loss to get hearing aids
- Our world has become noisier in recent years. Even people with normal hearing can benefit from communication strategies

# Questions?





# Thank you

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