

# A Primer on Living With Hearing Loss

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**If you are hard of hearing,**



**YOU  
ARE  
NOT  
ALONE**



# HEARING LOSS STATISTICS

- There are 48 million Americans with measurable hearing loss.
- Only 1 out of 5 people who could benefit from wearing hearing aids actually wears them.

## Hearing loss affects all age groups

- 65% of people with hearing loss are under age 65.
- 15% of school age children have a measurable hearing loss.

SOURCE: Better Hearing Institute

# What are the causes of hearing loss ?

Cause of Hearing Loss	Percent Due to Cause
At birth .....	4.4%
Ear infection .....	12.2%
Ear injury.....	4.9%
Loud brief noise .....	10.3%
<b>Other noise .....</b>	<b>23.4%</b>
Getting older.....	28.0%
Other.....	16.8%

*Source: Ntnl. Center for health statistics, data from the National Health Interview Survey Series 10, Number 188, Table 16, 1994.*

# The three types of hearing loss

Conductive hearing loss

Sensorineural hearing loss

Mixed hearing loss

# Sensorineural Hearing Loss

Sensorineural hearing loss occurs when the inner ear or the nerve pathways from the inner ear to the brain are damaged. Most of the time, SNHL cannot be medically or surgically corrected. This is the most common type of permanent hearing loss.

SNHL reduces the ability to hear faint sounds. Even when speech is loud enough to hear, it may still not be intelligible.

## Some possible causes:

- ✓ Illnesses
- ✓ Drugs that are toxic to hearing
- ✓ Hearing loss that runs in the family (genetic or hereditary)
- ✓ Aging
- ✓ Head trauma
- ✓ Malformation of the inner ear
- ✓ Exposure to loud noise

# Conductive hearing loss

Where sound is not conducted efficiently through the outer ear canal to the eardrum and on to the middle ear.

Conductive hearing loss usually involves a reduction in sound level or the ability to hear faint sounds. This type of hearing loss can often be corrected medically or surgically.



## Some possible causes:

- ✓ Fluid in the middle ear from a cold
- ✓ Ear infection (otitis media)
- ✓ Allergies (serous otitis media)
- ✓ Poor eustachian tube function
- ✓ Perforated eardrum
- ✓ Benign tumors
- ✓ Impacted earwax (cerumen)
- ✓ Infection in the ear canal (external otitis)
- ✓ Infection in the outer ear canal - Swimmer's Ear (otitis externa)
- ✓ Presence of a foreign body
- ✓ Absence or malformation of the outer ear, ear canal or middle ear

## Mixed hearing loss

Conductive hearing loss in combination with a sensorineural hearing loss (SNHL).

Damage in the outer or middle ear and inner ear (cochlea) or auditory nerve.

<http://www.asha.org/public/hearing/Mixed-Hearing-Loss/#sthash.QNwbLnZd.dpuf>

## Here's one solution

...or you can just cup your hands behind your ears.

Try it - it really does work  
but there are better  
solutions.....



A better solution is  
hearing aids



or,  
if the hearing loss is severe,  
a cochlear implant



## Some benefits of wearing hearing aids:

- ✓ Hear much better in 1 on 1 conversations or in small groups.
- ✓ Hear the phone ringing and hear better on the phone.
- ✓ Hear the door bell or a knock on the door
- ✓ Have a better relationship with your family
- ✓ Feel better about yourself
- ✓ Improve your mental health
- ✓ Improve your ability to concentrate and remember
- ✓ Feel more independent and secure
- ✓ Feel less tired or exhausted
- ✓ Be more able to participate in social gatherings
- ✓ Be able to increase your social contacts

## What's a cochlear implant?

An implanted electronic device that produces useful hearing sensations to a person with severe to profound nerve deafness by electrically stimulating nerves inside the inner ear.

- The externally worn microphone, sound processor and transmitter system.
- The implanted receiver and electrode system, which contains the electronic circuits that receive signals from the external system and send electrical currents to the inner ear.

A magnet that holds the external system in place next against the implanted internal system. The processor can be worn entirely behind the ear or be worn in a pocket, belt pouch, or harness.

# You're never too young or too old.... for a cochlear implant



# Hearing aids and cochlear implants are simply that, an AID.



Unlike eyeglasses, they cannot restore hearing to “normal” or even almost “normal”.



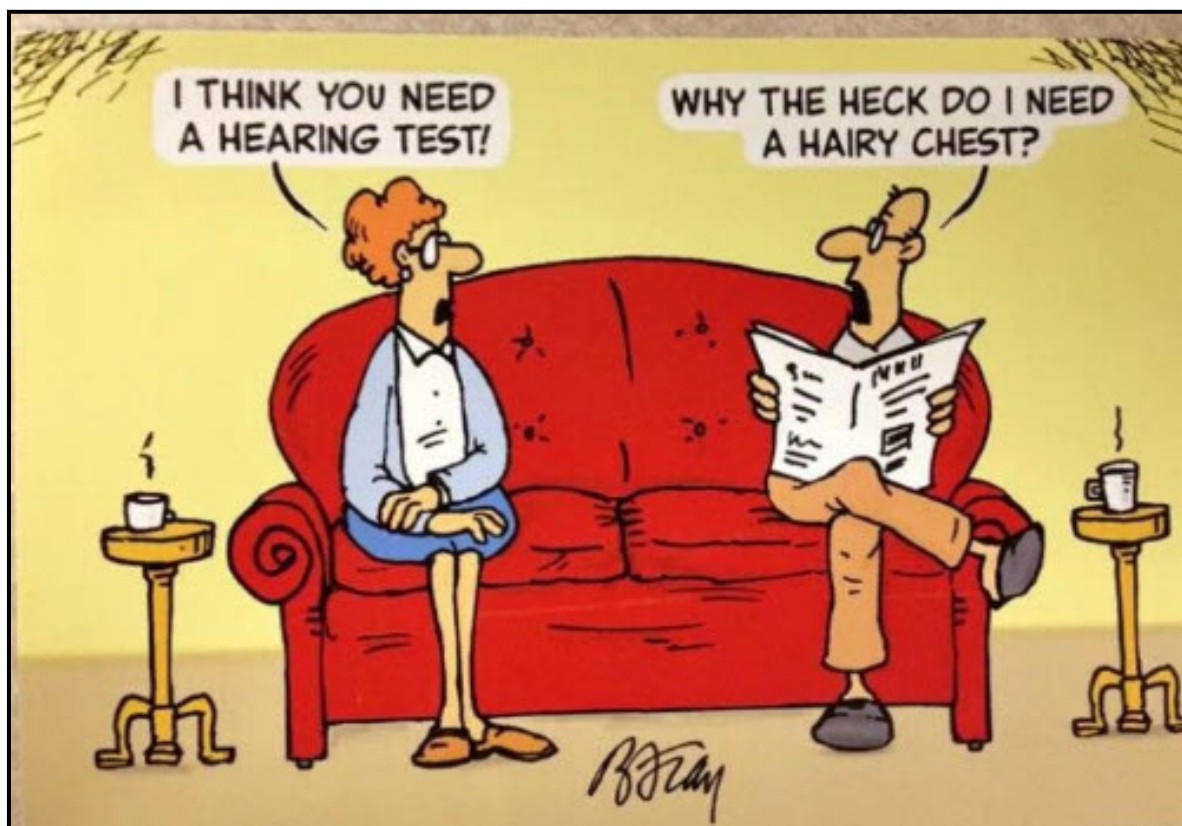
# Hearing aids are most effective in 1 on 1 settings



Good directional mics have an effective hearing range of six feet or less

(Etymotic Research, 2000a)

## Beyond hearing aids - laugh at yourself



Or

“Not Very Far”

# Communication Strategies

Hearing loss impacts not just the person who is hard of hearing, it's a problem for those who interact with with them.

Both should try to use these strategies whenever possible.

## First and Foremost

Get my attention before your talk to me and don't  
try to talk to me from another room

# Face me and maintain eye contact

Face the person with hearing loss. Make eye contact. Your facial expressions and body language add vital information to the communication. For example, you can “see” a person’s anger, frustration, and excitement by watching the expression on his or her face.

# Keep hands away from face

- When talking, try to keep your hands away from your face.
- If you are a smoker, hold the cigarette in your hands while talking. You will produce clearer speech and allow the listener to make use of those visual cues.

# Avoid covering or changing the shape of your lips and mouth

- Many HoH read lips (sometimes without realizing it).
- Avoid overdoing or creating odd lip shapes
- Do not talk with food in your mouth or chew gum.
- heavy beards and moustaches can also hide your mouth.

# Speak naturally

- Speak distinctly, but without exaggeration.
- You do not need to shout. Shouting actually distorts the words.
- Try not to mumble - this is very hard even for those with normal hearing to understand,
- Speak at a normal rate, not too fast or too slow.
- Use pauses rather than slow speech to give the person time to process speech (more processing later).

# Rephrase rather than repeat

If the listener has difficulty understanding something you said, find a different way of saying it. If he or she did not understand the words the first time, it's likely he or she will not understand them a second time. So, try to rephrase it.



# Avoid or eliminate background noise

- Turn off the radio or television.
- Move to a quiet space away from the noise source.
- When going to a restaurant or making dinner reservations, ask for a table away from the kitchen, server stations, or large parties.
- Look for and sit away from muzak speakers.
- Ask that the music be turned down.

# Talk away from background noise

If the conversation is critical, move to a quieter setting/room to talk.

# Look for good lighting

When in a restaurant or other social gathering, sit where there is good lighting so that your face can be more easily seen. Also, avoid strong lighting coming from behind you, such as through a window.

Writing, texting, using visual media (such as pictures, diagrams and charts) and assistive devices can be effective when hearing is just too difficult.

Don't try to talk from another room

# Speech processing

- Recognize that hard of hearing people hear and understand less when they are tired or ill.
- As we age, the brain's ability to process sounds into speech slows down, avoid talking too fast.

# Coping Strategies-Behavior

Used both by the hard of hearing and those who interact with them

- Get my attention before your talk to me.
- Face me when talking to me.
- If you cover your lips I can't see them.
- Make certain the lighting is good with no glare facing me so I can see your face.

# Coping Strategies-Behavior

- Keep so called “background” music in the background or, better yet, turned off.
- To talk to me, please turn off the TV.
- Avoid cross talk.
- Talk to me in the same room.
- If we're going out to lunch and you're picking the place – pick a quiet one.

# Assistive Technology

Amplified telephones

Captioned telephones

Personal amplifiers

Personal FM

Hearing loops

Neck Loops

Bluetooth

More.....

# Amplified telephones

Must have volume control

Should have speaker (headset) jack..

Good to also have a tone control



Must be hearing aid compatible - HAC  
(T and M ratings or 3 or more)





# Captioned telephones



CapTel text telephone

Free from the NMCDHH

[www.hamiltonrelay.com](http://www.hamiltonrelay.com)

**FREE**

CaptionCall phone

Free from CaptionCall

[www.captioncall.com](http://www.captioncall.com)





## Personal Amplifiers

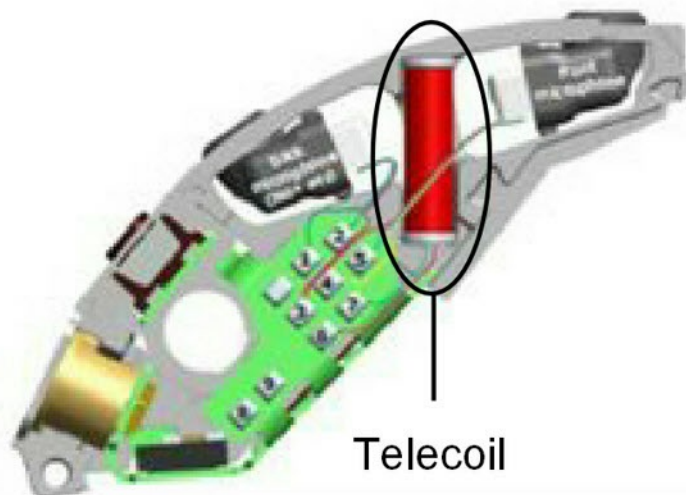
Often referred to as a  
“Pocket Talker.”

Eliminates background sounds  
while amplifying the speaker’s  
voice and sends it through a  
headset or magnetic  
transmission to the  
**telecoils** in hearing  
aids.



## What's a Telecoil ?

Think of it as an antenna that receives a magnetic signal that the hearing aid turns into sound.

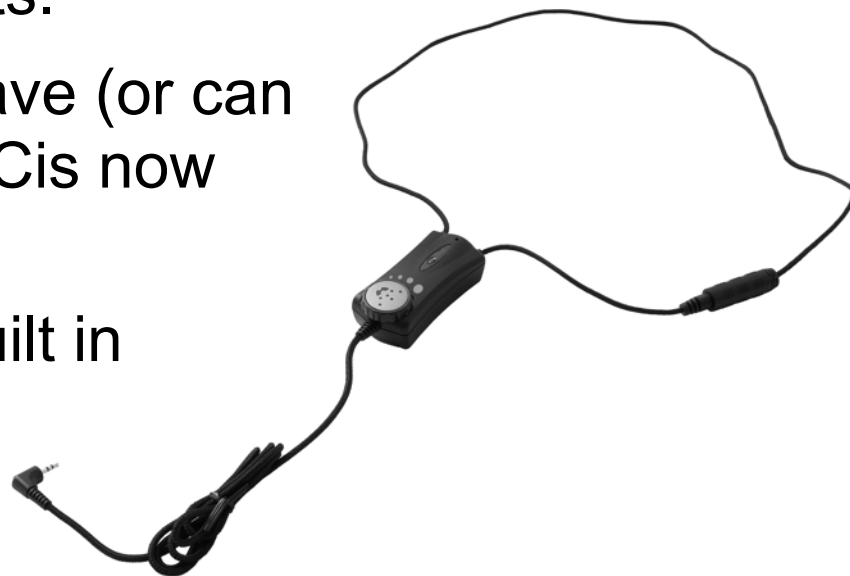
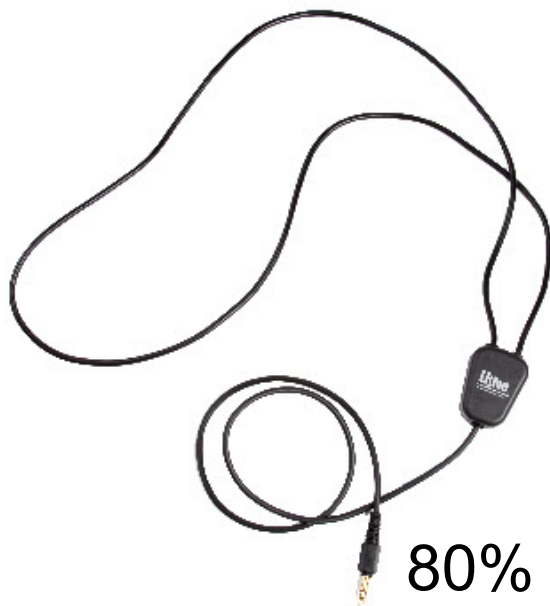


## Neck Loops

Transmit sound from any device with a speaker/headset jack via a magnetic signal to telecoil equipped hearing aids or cochlear implants.

80% of hearing aids have (or can have) telecoils and all Cis now have them.

Some have mic and built in amplifier.



# Personal FM



Miniature radio transmitter and receiver used with headset, ear buds or neck loop.

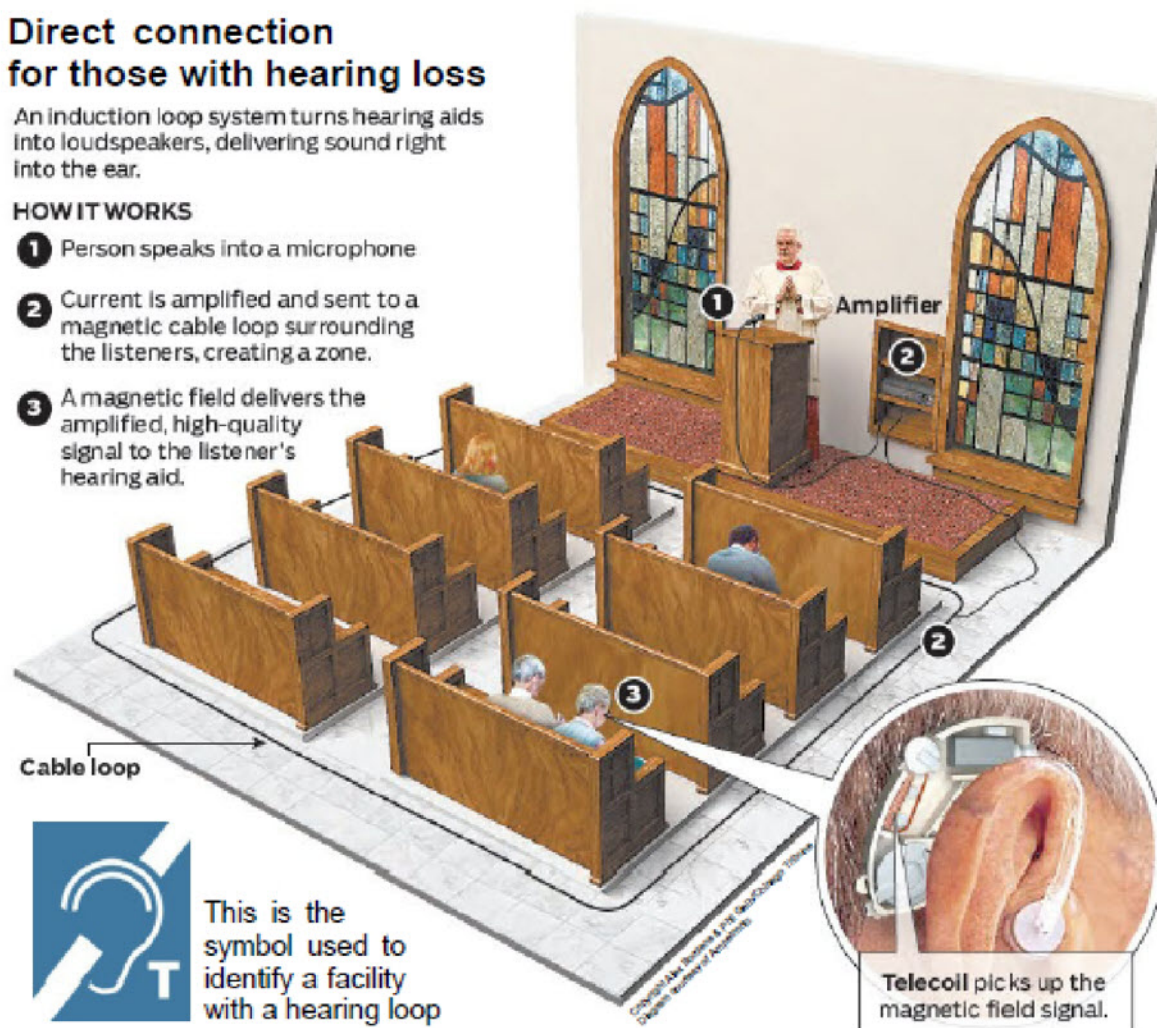
# Hearing loops

## Direct connection for those with hearing loss

An induction loop system turns hearing aids into loudspeakers, delivering sound right into the ear.

### HOW IT WORKS

- 1 Person speaks into a microphone
- 2 Current is amplified and sent to a magnetic cable loop surrounding the listeners, creating a zone.
- 3 A magnetic field delivers the amplified, high-quality signal to the listener's hearing aid.







**Stream sound wirelessly from a  
variety of sources directly to  
your hearing aids**



**Cell Phone**



**Home TV**



**Computer**



**Laptop**



**Tablet**



**Dining Out**

## **A sampling of other devices**

**HearAll™ Cell Phone Amplifier – Amplifies the caller's voice up to 100 times louder. Can be used as a handset or speakerphone.\***

**TV Ears - transmits sound to headset or neck loop via an infra red signal**

**TV SoundBox® Wireless Speaker – Brings the sound right to you!\***

**CentralAlert™ Wearable Notification System – Be alerted 24/7 to activities occurring around you in your home.\***

**Cell Phone Ringer/Flasher – Alerts you to incoming calls/texts from yourhome or cell phones.\***

**Shake Awake bed shaking alarm clock.**



# **Where do you get this equipment?**

**NM Commission for Deaf and Hard of Hearing**  
**[www.cdhh.state.nm.us](http://www.cdhh.state.nm.us)**

**The Hearing and VisionCenter**  
**[www.hearingandvisioncenter.com](http://www.hearingandvisioncenter.com)**

**Online Retailers**  
**[www.harriscomm.com](http://www.harriscomm.com)**  
**[www.teltex.com](http://www.teltex.com)**

# Hearing Loss Association of America

www.hearingloss.org



The screenshot shows the homepage of the Hearing Loss Association of America (HLAA). At the top is the HLAA logo and the text 'The Nation's Voice for People with Hearing Loss'. A search bar and social media links are on the right. A purple navigation bar contains links: HOME, HEARING HELP, SUPPORT, ONLINE COMMUNITY, EVENTS, ADVOCACY, MEMBERSHIP, TRAINING, DONATE, and ABOUT US. The main content area features a large banner for 'Walk4Hearing Ambassador' with a photo of a young girl and the text 'Featured in Fairfax Times'. Below the banner are 'BACK' and 'NEXT' buttons and a series of four dots with the third one filled. To the right of the banner are four promotional boxes: 'WALK4 HEARING Find A Walk', 'Locate Your Local Chapter' (with a US map), 'Hearing Loss Magazine' (with a magazine cover), and 'Convention 2014 Registration Is OPEN!' (with a Texas map). At the bottom are three buttons: 'Current News', 'HLAA Updates', and 'Take Action'.



## **Educational meetings**

September thru June

## **Newsletter**

Wired for Sound

## **Web site**

[www.HLAAbq.com](http://www.HLAAbq.com)

## **Advocacy**

Laws and regulations

## **Loop New Mexico**

# Communication Access



- ✓ PA System
- ✓ Hearing Loop
- ✓ CART
- ✓ ASL Interpreters



# Some recent HLAAbq programs

REPORT FROM WASHINGTON – HLAA  
National Director of Public Policy Lise hamlin

IPAD APS - Roger Robb of the NM  
Commission for Deaf and HoH

DIZZY OR VERTIGO? - Dr. Bradley Pickett.

HEARING AID PANEL – representatives of  
Resound, Oticon and Siemens.

50+ and HoH – U of Florida Audiology/AAA  
President Professor Pat

HEAR AT THE MOVIES - Cinemark

TINNITUS & PHANTOM SOUNDS –  
Audiologist Elaine Almquist.

LEGAL HELP FOR THE HoH – Senior  
Citizens Law Office .

GOING TO THE DOGS – Rick Dillander from  
A Fresh Perspective Dog Training

GOOD GADGETS – ATS Resources

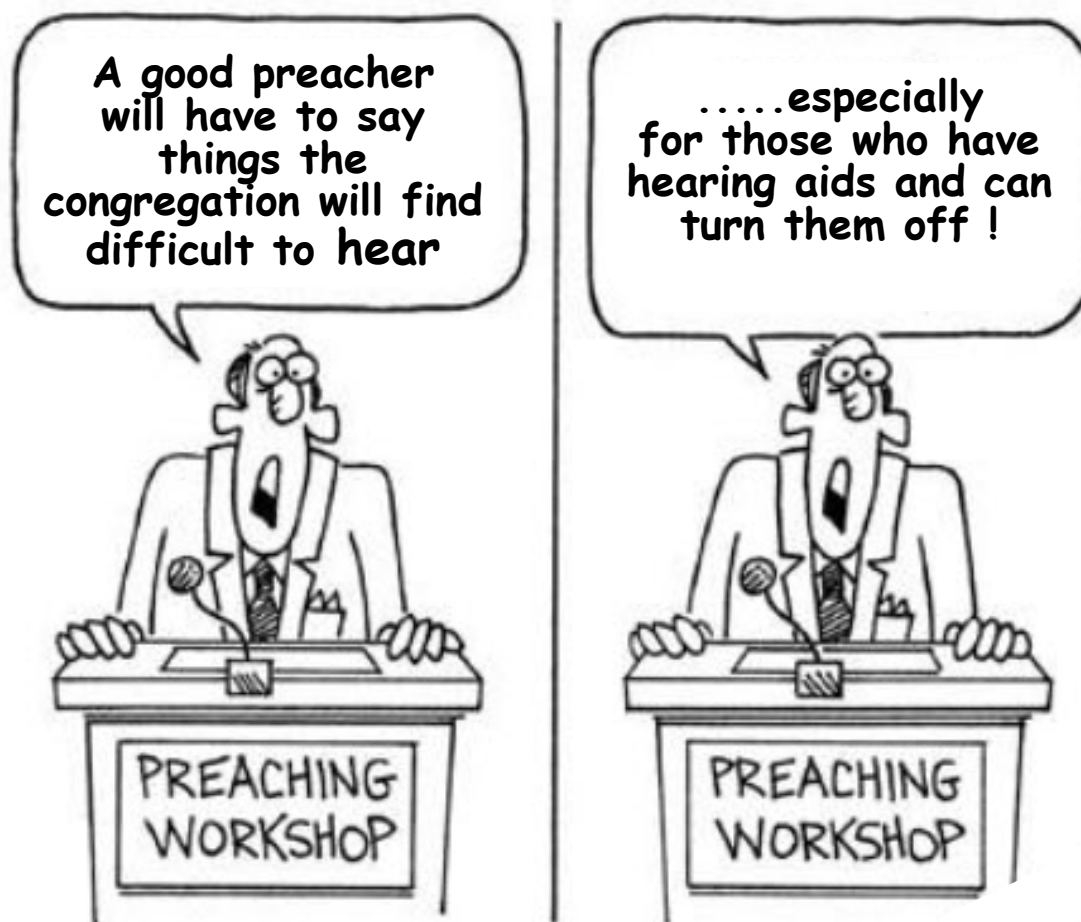
HEARING AIDS 101 – Audiologist Carol  
Clifford

HoH SIGNIFICANT OTHER – panel.

COCHLEAR IMPLANTS – Cochlear Americas

LIVING WITH HEARING LOSS - Dr. Sam  
Trychin

## Hearing loss does have some benefits.....





# Living With Hearing Loss

Stephen O. Frazier, Hearing Loss Support Specialist

