

## Getting in "The Loop"

The why, what, and how of hearing better.





# Introduction

### Mary Meier, Doctor of Audiology

#### Disclaimers:

- ✓ Employed at Olmsted Medical Center
- ✓ Dispense variety of hearing aids and assistive devices through OMC



## **Objectives**

- Learn the basics of HEARING HELP
- Learn the basics of LOOPING
- Learn about REDEEMER's LOOP
- Able to ask questions about hearing aids



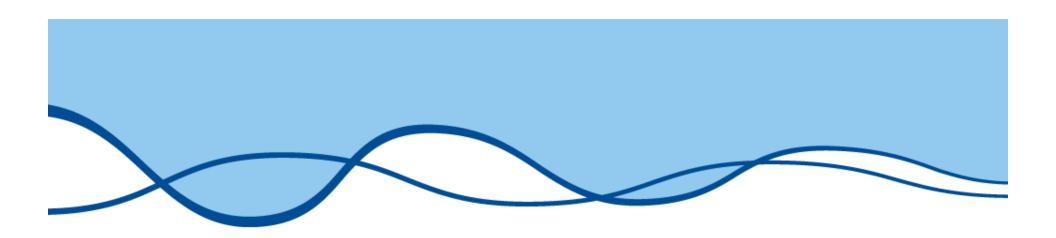
## **Hearing Loss Numbers**

36 million people have hearing loss – and the number is growing

You don't have to be "old" to have hearing problems. Half of all people with hearing loss

are UNDER 60 years old





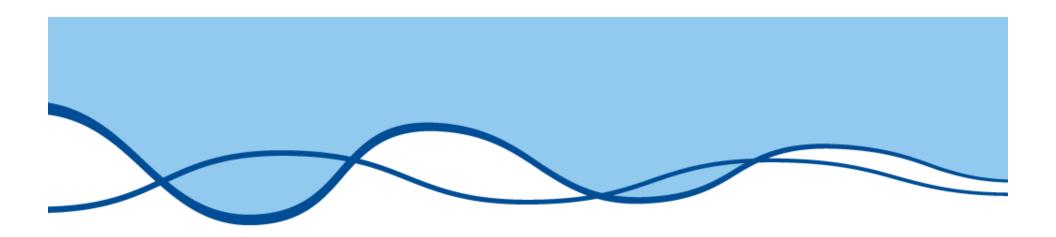
## Basics of Hearing Problems



## **Basics of Hearing Problems**

- Temporary Causes
  - Ear wax
  - Ear infections
- Permanent Causes
  - Noise damage
  - Systemic changes (diabetes, cardio-vascular)
  - Genetic (present at birth, but might develop with age)





## Basics of Hearing Help



## **Basics of Hearing Help**

- Communication Tips
- Hearing Aids
- Assistive Listening Products
- Surgery



## **Communication Tips**

- Ask for clarification not repeat
- Ask for the current topic
- Stay close (yard stick rule)
- Be realistic; be patient
- Use hearing aids properly
- Use hearing help devices



## **Assistive Listening Products**

#### Traditional

- Cheap over-the-counter products
- TV ear piece with or without hearing aid
- FM "radio" signal with special device
- Landline telephone amplifier
- Landline telephone caption (voice to text on a screen



## **Assistive Listening Products**

- Newer products
  - Cellphone help (linked with hearing aids)
    - Use as remote control
    - Use a extended microphone (Live Listen on iPhone)
    - Use with new "Bose" and iPhone "hearing aid" products (~ \$500 each)
  - LOOPING! (OLD BUT NEW!)



## LOOPING- the BIG picture

- What is **Looping**?
- How does it work?
- How can it help me?

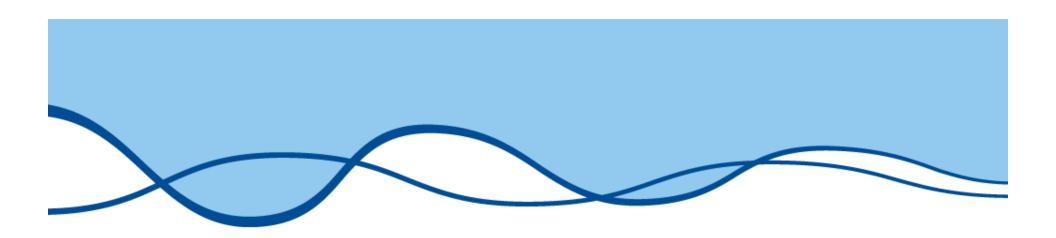


### What is "LOOPING"

## Simply:

# A way to transfer sound through a copper wire





## How does LOOPING work?



## **Looping Basics**

#### Looping works with

- 1. "wire" around the room
- 2. "wire" connected to a microphone
- 3. sound sent from the wire to the "air"
- 4. Telecoil (copper wire) in hearing aid to pick up the "signal in air"



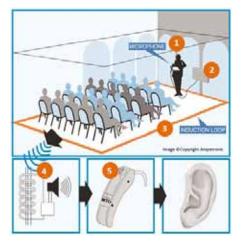
## What can be "looped"?

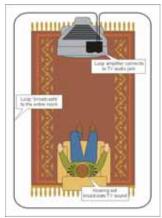
- Loop wires can be installed in any room
  - Worship space
  - Meeting room
  - Public area for announcements (airports)
  - Personal home: living room
- Loop wires need to be installed correctly



## Types of loops

#### **Room Loops**





#### **Personal Loops**







## Look for looping!

#### Switch hearing aid to T-coil

#### This blue ear sign means a loop is available!

- London: tours; The "Tube" (Subway); taxis; theater; banks; stores
- New York City: all taxis; theater
- Down South: Publix Grocery stores, variety of places
- Midwest: Less common overall but growing!
  - Wisconsin Fox Valley area
  - Michigan Holland area; Michigan State University stadium
  - Minnesota Airport announcements, theater, churches
- Rochester (see next slide)



## How can looping help me?

- Uses your personal hearing aid
  - No need to borrow an "ear piece"
  - Able to use your personal settings
  - Easy to be discreet and push your t-coil button
- Removes "echo"
- Reduces background noise



## Hearing Better with a Loop

In hard listening situations like NOISE and ECHO...

Only 13% found their hearing aid helpful BUT 86% found the hearing aid + loop helpful

The Hearing Review survey of 866 participants. (Kochkin, et al. 2014)



## Redeemer Loop

- Where is it?
- How do I connect to it?



## Redeemer's Loop

- Sanctuary
- Chapel
- Microphone and system set up
- Where it is NOT:
  - meeting rooms, downstairs



## **CONNECT to Redeemer's Loop**

- Be sure system mic is turned on
- Turn on your personal t-coil
- Sit wherever
  - Signal varies a bit (normal)
  - Some places are louder



## Telecoil (t-coil) basics

- Need T-coil to use a LOOP in hearing aid
- T-coil is built inside the hearing aid
- Not all hearing aids have t-coils
  - Need to be ordered with t-coil
  - Need to have t-coil activated in software by audiologist



### What if I don't have a t-coil?

- If your hearing aid does not have a t-coil...
  - ✓ Borrow a device from church
    - ✓ Use earphones with yoour hearing aids still in place
    - ✓ Use earphones without a hearing aid
    - ✓ Use one of the older "FM" listener devices from church
  - ✓ Order new T-coil hearing aids from audiologist ☺



## Troubleshooting your T-coil

- For your audiologist:
  - You don't have a t-coil or a push button
  - Sound is way too loud
  - You can't hear the people right by you
- Potential loop system problem:
  - Humming noise (no ground or interference)
  - Others talking (Spill over form loop near by)
  - Dead spots (installation challenge)



## Loops in Rochester Area

- 125 Live meeting room
- ABC meeting room
- Charter House, Edward's Hall, Northwood Meeting Room
- Churches: Bethel, Calvary Episcopal, Christ United Methodist, REDEEMER, Zumbro Lutheran,
- Other churches in other communities (Spring Valley Our Savior's Lutheran)



## MN Looping "Law"

- 2017 MN Legistalation passed
  - "Good Acoustics and Looping Law"
  - If you use State funds for a building, you need to make it "listener friendly"
  - But businesses can still get by the law
- NO loops installed in any State Capital offices or meeting rooms (...yet)



## **Loop Cost Estimates**

Place	Estimated Cost of Install
Home Living Room	\$200
Business Countertop	\$500
Business Meeting Room	\$2,000
Worship Area	\$5,000 to \$30,000
Concert Hall	\$30,000 to \$75,000
Stadium	\$100,000 to \$150,000





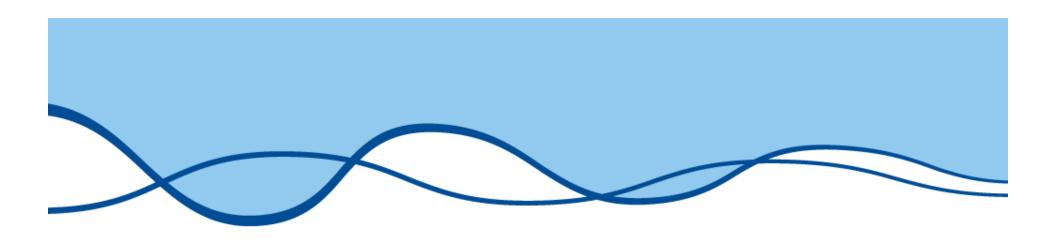
## **QUESTIONS?**



## Thank you!

- Contact your local audiologists:
  - Amy Swain Hearing Centers
  - Mayo Clinic
  - Olmsted Medical Center
  - ❖ Advanced, specialized degrees in hearing science
  - ❖ Each offers diagnostic testing, objective consultations, competitive pricing, and best of all ...
  - ❖ SCIENTIFIC approach to hearing help





And Jesus said...

"He who has ears, let him hear..."

Mark 4:9

