

# Working With Hearing Loss In An Aging Population


## Suggestions and Approaches for Providers

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## Terms... A Confusing Cornucopia

- Some terms we do not use



**Deaf Mute**

**Hearing Impaired**

**Deaf and Dumb**

## Terms... A Confusing Cornucopia

- Some are more helpful than others
  - We prefer functional definitions:
    - **Deaf:** A person with a hearing loss who, with or without amplification, cannot understand spoken language.

**Note:** Many people who have lost hearing as they age do not accept the label "deaf" regardless of the actual degree of hearing loss!

## Terms... A Confusing Cornucopia

- Some are more helpful than others
  - We prefer functional definitions
    - **Hard of Hearing:** A person with a hearing loss who, with or without amplification, can understand spoken language.

**Note:** Again many older people will reject this label. Be sensitive to what they want.

## Terms... A Confusing Cornucopia

- We like to limit our labels to:
  - People With Hearing Loss
  - Deaf
  - Hard Of Hearing

**The best strategy is to ask what the consumer prefers!**

## Myths About People with Hearing Loss

- People with hearing loss can hear if they try hard enough

**"He hears me when he wants to!"**
- Expressive and receptive communication skills are symmetrical

**"I understand him just fine!"**
- There is no need to do anything special for people "with hearing loss"

**"I treat everyone the same!"**
- There aren't many people hearing loss

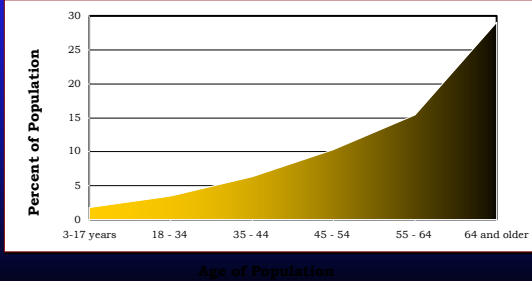
## Statistics on Alabamians With Hearing Loss

- There are **383,935 Alabamians** with a hearing loss great enough to impact their lives - or nearly 1 in 10 (8.6%)

**This number will increase as the population ages**

# Working With Hearing Loss In An Aging Population

## Prevalence of Hearing Loss by Age

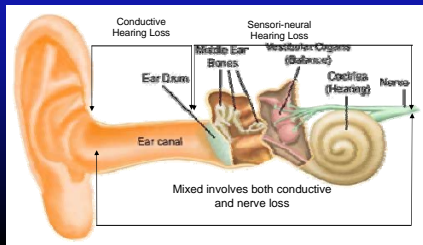


## Age Related Hearing Loss

- Hearing loss is frequently undiagnosed
  - The loss is often masked by behaviors or dementia
  - People rarely think of hearing loss
- Older people frequently deny hearing loss
- Staff underestimate or minimize the impact of hearing loss

## Types and Degrees Of Hearing Loss

There are many kinds of hearing loss  
First, let's look at the human ear



## Types and Degrees Of Hearing Loss

There are many kinds of hearing loss

### Types of Hearing Loss

- Conductive
- Sensori-neural
- Mixed

### Degrees of Hearing Loss

- Mild: 20 - 40dB
- Moderate: 40 - 70dB
- Severe: 70 - 90dB
- Profound: 90>dB

Hearing is NOT measured in percentages. Instead, it is measured in an arbitrary unit of loudness called the DECIBEL. The decibel (dB, or dB HL) is a logarithmic scale.

Physically, every 6 dB increase represents a doubling of sound pressure level. Perceptually, every 10 dB increase sounds twice as loud.

## A Digression...

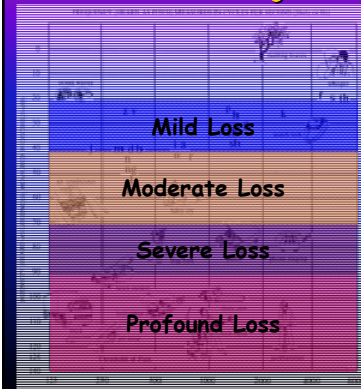
### • Tinnitus

- Causes are poorly understood
- May be single or multiple tones
- Can be subtle to "ear-splitting"
- Can be associated with dizziness/vertigo
- The following are associated with tinnitus
  - o Sensori-neural hearing loss - especially noise-induced
  - o Certain ototoxic medications - including some anti-depressants
  - o Ear or sinus infections
  - o Head and neck trauma
  - o Certain types of tumors
- Has very real impact on how the person feels
  - o Need for coping strategy

**TINNITUS** ti-NIGHT-us or TIN-i-us; the perception of sound in the ears or head where no external source is present. Both pronunciations are correct; the American Tinnitus Association uses ti-NIGHT-us. The word comes from Latin and means "to tinkle or to ring like a bell."

From [http://www.ata.org/about\\_tinnitus/](http://www.ata.org/about_tinnitus/)

## Relative Intensity of Familiar Sounds



- It does not take a huge loss (in dB) to have a tremendous impact on communication.

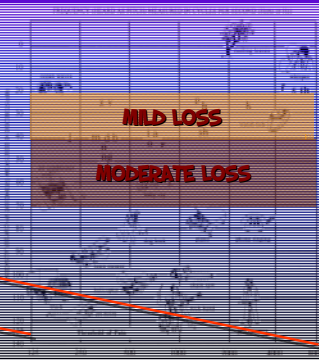

A hearing loss in the "moderate" range will mean difficulty hearing 90% of the speech sounds.

**Lets see why...**

# Working With Hearing Loss In An Aging Population


## Frequency Matters Too

- There is more to it than just how loud it has to be!
- Frequency (or Pitch) is also important.
- “



## Frequency Matters Too

- There is more to it than just how loud it has to be!
- Frequency (or Pitch) is also important.
- “Speech Banana”
  - All speech sounds are here
- You don't need a big hearing loss to have big problems!



## Our Task:

- Identify the challenges, understand the differences and learn to make adjustments so we can create a therapeutic environment.

**The main emphasis must be ensuring that communication happens**

## Learning to Identify People with Hearing Loss

- Many people with significant hearing loss are not aware they have it!
- Methods of screening:
  - Mechanical
    - o Most accurate, requires training and equipment.  
**High false positive rate**
  - Question and Answer
    - o Less accurate, easy and requires little training.  
**High false negative rate**
- Geriatrics programs should screen all new consumers

## Critical Questions

- To understand communication needs of your patients, you need to ask:
  1. Severity
  2. Age of onset
  3. Cause
- It might help to know:
  1. Education
  2. Family communication styles

## Making Programs Work

- We can get some guidance from the ***Americans with Disabilities Act***

## What the A.D.A. Requires

- Under Title II of the ADA State and local governments (and the programs they fund) may not refuse to allow a person with a disability to participate in a service, program, or activity simply because the person has a disability

## What the A.D.A. Requires

- Areas in which accommodations can be made include:
  - Modifications in policies, practices, and procedures
  - Furnish auxiliary aids and services when necessary to ensure effective communication

## Auxiliary Aids and Services

- The regulation defines "auxiliary aids and services" comprehensively.

The definition includes:

Qualified interpreters, notetakers, transcription services, written materials, telephone handset amplifiers, assistive listening devices, assistive listening systems, telephone compatible with hearing aids, closed caption decoders, open and closed captioning, telecommunications devices for deaf persons (TDD's), videotext displays, or other materials available to individuals with hearing impairments; . . . and . . . other similar services and actions.

## What the A.D.A. Requires

- Areas in which accommodations can be made include:
  - Modifications in policies, practices, and procedures
  - Furnish auxiliary aids and services when necessary to ensure effective communication
  - Operate their programs so they are readily accessible to and usable by individuals with disabilities
  - May provide special benefits, beyond those required by the regulation, to individuals with disabilities

## A Word About Interpreters:

- While most people who are hard of hearing do not sign, some do
  - Interpreters may be a choice
  - If an interpreter is needed be sure to use one that is **QUALIFIED**
- If you DO use interpreters, remember:

Working with interpreters involves specialized skills on the part of the clinician -

**GET TRAINING!**

## Interpreters:

- Working with interpreters involves specialized skills on the part of the clinician
  - Communication is more than just the content, it is culture-bound
  - Simple words like "school" or "family" carry very different meanings
  - Many concepts are not interpretable

**Clinicians have to be continually thinking about how this effects the therapeutic process.**

## Sign Language Interpreters; “The A.D.A.’s Definition”

### • Who is a qualified interpreter?

A qualified interpreter, is able to sign to the individual who is Deaf what is being said by the hearing person and who can voice to the hearing person what is being signed by the individual who is Deaf. This communication must be conveyed **effectively, accurately, and impartially, through the use of any necessary specialized vocabulary.**

## Sign Language Interpreters; “The A.D.A.’s Requirements”

- Can a public accommodation use a staff member who signs “pretty well” as an interpreter for meeting with individuals who use sign language to communicate:  
Not unless the staff person is **qualified** as an interpreter

- If a sign language interpreter is required for effective communication, must only a certified interpreter be provided?

Under the ADA, NO...

**BUT Under Alabama Law, Yes!**

## Interpreters:

- Working with interpreters involves specialized skills on the part of the clinician
  - Must have an understanding of the impact of a third person on the dynamics of therapy
    - Transference and countertransference issues.
    - Recognize that interpreters have their own “baggage”
  - Must have a level of trust with the interpreter
    - Take time to conference with the interpreter to establish therapeutic goals and objective

## Approaches to Communication

- Two key thoughts to remember:
  - Make information visual – Don’t rely solely on auditory information
  - Make sure all the information is given – in more than one way
- “They can lipread, right!?!”

## “All Deaf People Can Lipread, Right?”

- Speechreading: 1 part science, 3 parts guesswork...
  - Only 30% of English phonemes are visible on the lips
  - You have to have mastery of the language in order to speechreading well
  - Many words look alike – leading to misunderstanding.
  - It’s extremely dependent on external factors:
    - ◆ Lighting
    - ◆ Context
    - ◆ Stress or illness
    - ◆ Eye Contact
- Don’t misconstrue closure and predictive skills for hearing or speechreading

## Approaches to Communication

- Speechreading in *some* situations with *some* people
  - Should not rely on speechreading as the sole source and never in groups
  - You have to “check back” with the speechreader to make sure they understand – Don’t use “Yes or No” questions
  - If not understood - try paraphrasing.

## Other Approaches to Communication

- Text – based approaches
  - Writing
  - Computer Aided Real Time Captioning (CART).
    - CART transcription of what is being said will work well when the deaf or hard of hearing person has good English reading skills.
    - Less fancy versions of the same thing using a computer works well for one-on-one communication.
  - C-Print

### A Word About Writing:

1. Be careful that, if you use writing back and forth as an approach, the person can read English at a sufficiently high level as to understand what you are writing, and.
2. Don't "skip stuff" because writing takes longer!

## Other Approaches to Communication

- Assistive Listening Devices
  - Assistive listening devices can help some hard of hearing people by filtering out background noises and allowing them to focus on only the speaker
  - Generally two main types:
    1. infrared
    2. Induction
  - Costs vary by quality and complexity



## Key Thought:

- Make the environment

# VISUAL

If our hearing consumers can hear it  
Our deaf consumers should see it!

## Reasonable Accommodation vs. Functional Equivalence

- Reasonable Accommodation is **Process Based**
  - More provider centered
  - Minimizes services to the lowest legally acceptable level
- Functional Equivalence is **Outcomes Based**
  - More Client Centered
  - Maximizes services

## What is "Functional Equivalence?"

The consumer with hearing loss will receive the **same outcome** as a hearing consumer in any given activity.

## Achieving Functional Equivalence

- Environmental access becomes critical in "residential" settings (either individual or group).
  - An effective way to assure proper accommodation is to think:

**"Is everything that is audible to our hearing consumers, visible to our Deaf and hard of hearing consumers?"**

## Making the Environment Accessible

- Consider the following:
  - The most important consideration is a visual fire alert system:
    - o Use UL approved strobe lights, not standard flashing bulbs
    - o **Do NOT** rely on the staff to "get" the person with hearing loss!
      - (Or worse... other patients!)

## Making the Environment Accessible

- Consider the following:
  - The most important consideration is a visual fire alert system:
    - Flashing light for the door knock
    - Flashing visual or vibrating alarm for awakening
    - Flashing light (or other visual or tactile alert) to notify client that the telephone is ringing

## Making the Environment Accessible



It is very difficult to do better than the "all in one" Alertmaster 6000 system. Everything you need is in one place.

## Making the Environment Accessible

- Consider the following:
  - Location, location, location: Help your consumers see what is going on
  - Captions on the television
  - Written forms of any announcements made publicly or in meetings
    - o PA Systems are lousy for hard of hearing people!
  - Lots of signs are really helpful.

## Making the Environment Accessible

- Special Case: The phone
  - There are two approaches to helping people with hearing loss use the phone:
    - o Making it louder
    - o Adding text
  - Amplified phones are easy to get
    - o The better ones, like Clarion, also allow for tone (frequency) adjustment
  - Text based systems are getting better too



## Making the Environment Accessible

- When sound isn't enough
  - Captel™ is good approach. It allows the consumer to hear the other person but have text support when they need it
  - How it works...



## Making the Environment Accessible

- Many of these devices may be available to your consumers at little or no cost through the **Alabama Telecommunications Access Program**  
Contact the Alabama Institute for the Deaf and Blind Regional Center nearest you.  
(See current listing)

## Assessing What Your Consumer Needs

- Match accommodations according to a logical hierarchy:
  - Communication
  - Health and Safety
  - Privacy
  - Socialization
  - Independent Functioning

## Health and Safety

- All Consumers Should Have At A Minimum:
  - Visual Fire Alert in all places they usually spend time.
    - Bedroom
    - Common Areas (TV/Day Room, Dining Room)
    - Bathroom

## Health and Safety

- All Consumers Should Have At A Minimum:
  - Unequivocal Right to explanation of medications and Medical Procedures
    - This must be in a form of communication that the consumer can understand.
  - Right to Understand the Policies and Procedures of the Program

## Privacy

- We should allow consumers with hearing loss the same level of privacy that we give hearing consumers.
  - This usually means that some form of signaling is used before entering a consumer's room
  - There are many creative and inexpensive ways to do this.

## Socialization

- Do social activities enhance interaction or for they frustrate the consumer?
  - If communication issues are not addressed we are isolating consumers
    - o Need to be non-threatening and non-stressful

### Take Home Thoughts

- One third of your consumers over 65 have a hearing loss great enough to alter their ability to participate
- Hearing loss is often not detected and masked by other concerns
- Line staff need to have training in hearing loss, including practical suggestions

### Take Home Thoughts

- Consider screening all new consumers for hearing loss
- Even people who are “Hard of Hearing” will need some program modification
- Use an hierarchy of needs to determine modifications that will be beneficial

### Key Thought:

- Make the environment **VISUAL**

If our hearing consumers can hear it  
Our Deaf consumers should see it!

### Contacting the Office of Deaf Services

#### Office of Deaf Services

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