

# Working With Hearing Loss In An Aging Population

## Suggestions and Approaches for Providers

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# Agenda

- Is Hearing Loss Really a Problem?
- What is Hearing Loss?
- Screening for Hearing Loss
- What are “Reasonable Accommodations?”
- What is “Functional Equivalence?”
- Questions and Answers
- Wrap Up and Evaluation

Terms...

# A Confusing Cornucopia

- Some terms we do not use



# 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!”***

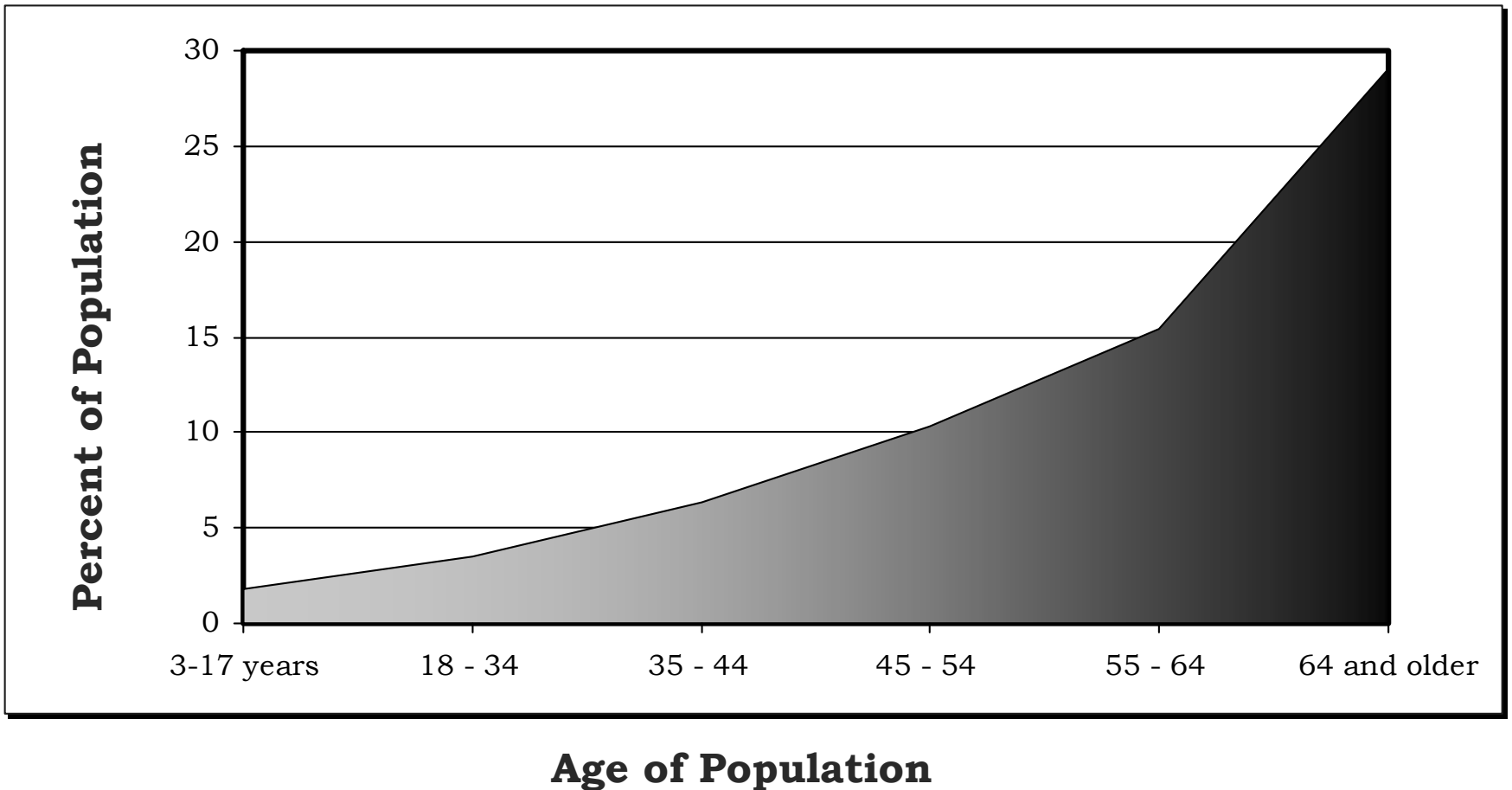
- There aren't many people hearing loss

# 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**

# 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

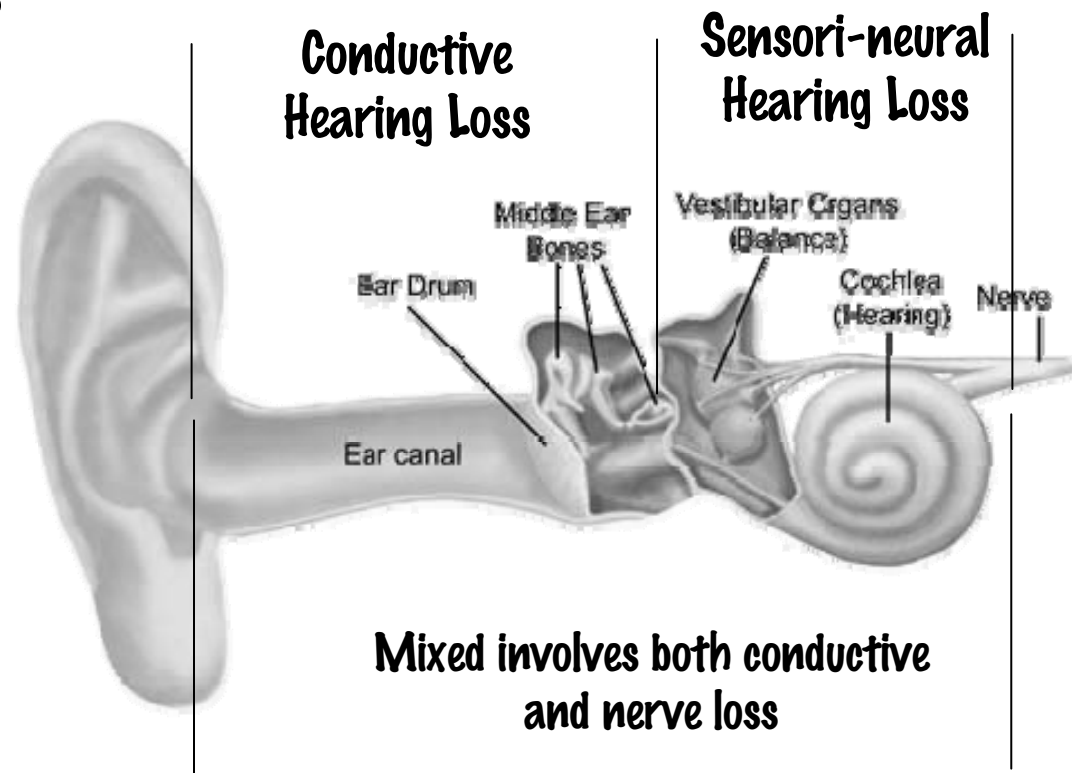


# Types and Degrees Of Hearing Loss

There are different kinds of hearing loss

## Types of Hearing Loss

- Conductive
- Sensori-neural
- Mixed



# Types and Degrees Of Hearing Loss

## 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...

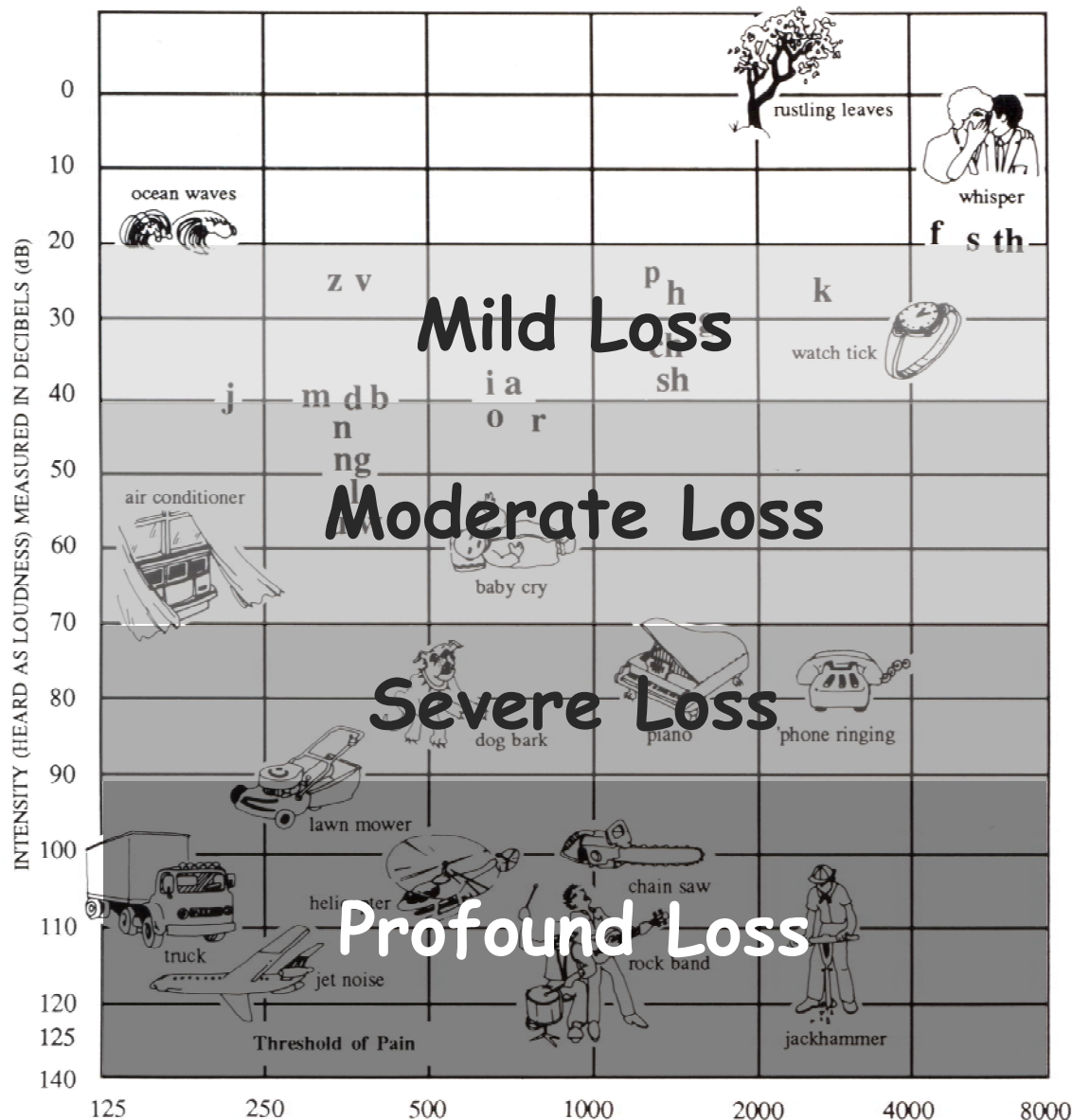
- Tinnitus
  - Causes are poorly understood
  - May be single or multiple tones
  - Can be subtle to “ear-splitting”
  - Can be associated with dizziness/vertigo
  - The following are associated with tinnitus
    - Sensori-neural hearing loss – especially noise-induced
    - Certain ototoxic medications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

**TINNITUS** ti-NIGHT-us or TIN-i-tus: 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

FREQUENCY (HEARD AS PITCH) MEASURED IN CYCLES PER SECOND (Hertz or Hz)



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

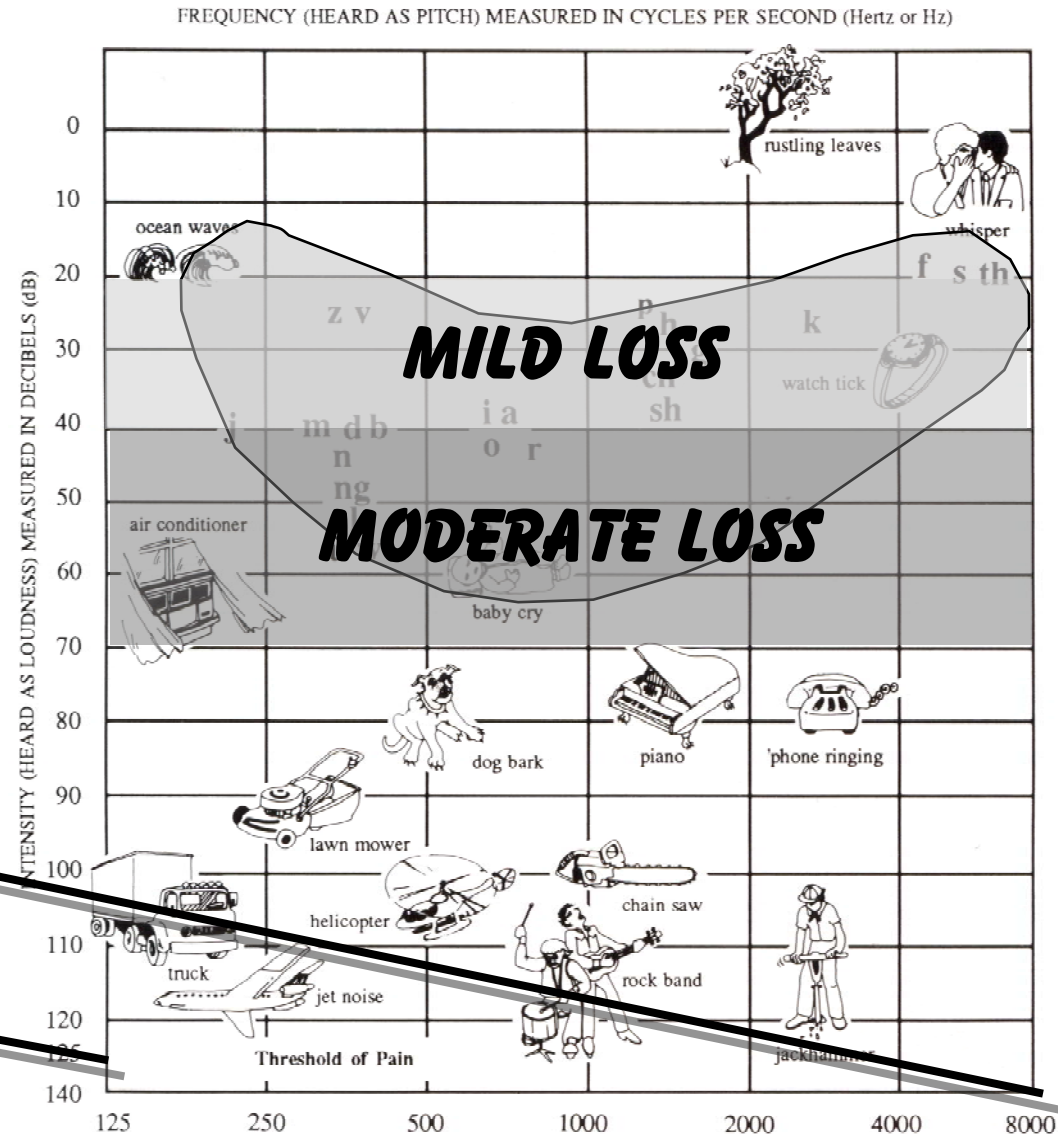
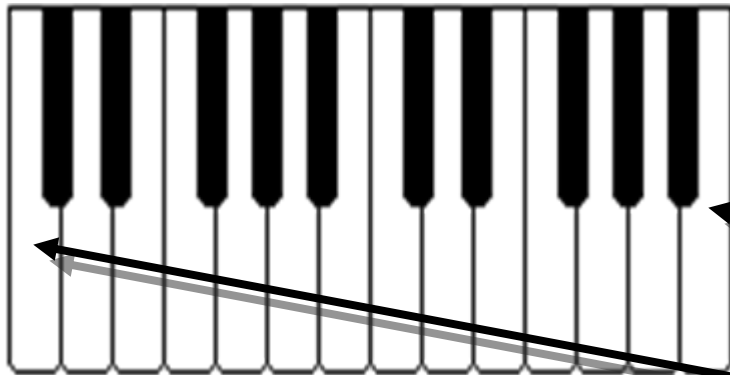
A hearing loss in the “moderate” range will mean difficulty hearing 90% of the speech sounds.

**Lets see why...**

# 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!

Low ← High



# 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
    - Most accurate, requires training and equipment.  
**High false positive rate**
  - Question and Answer
    - 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

# 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!***

# 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:

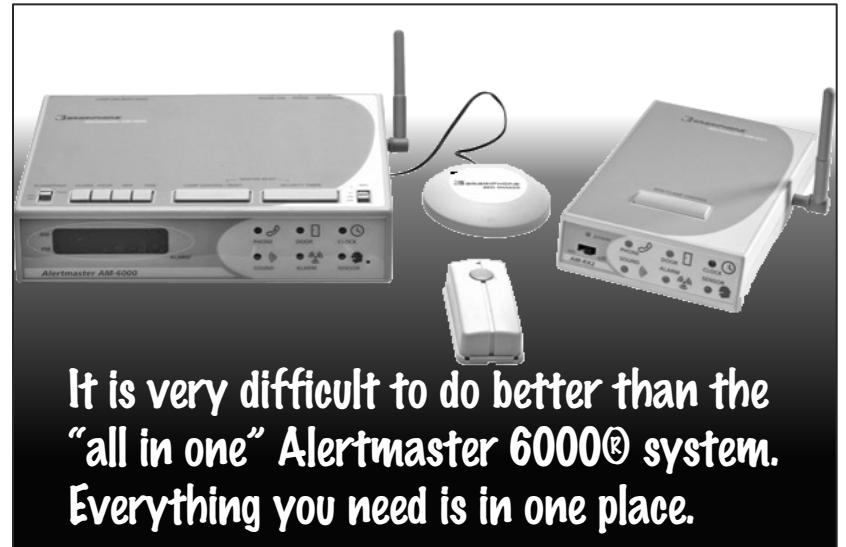
- Use UL approved strobe lights, not standard flashing bulbs

- 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

- 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
    - PA Systems are lousy for hard of hearing people!
  - Lots of signs are really helpful.





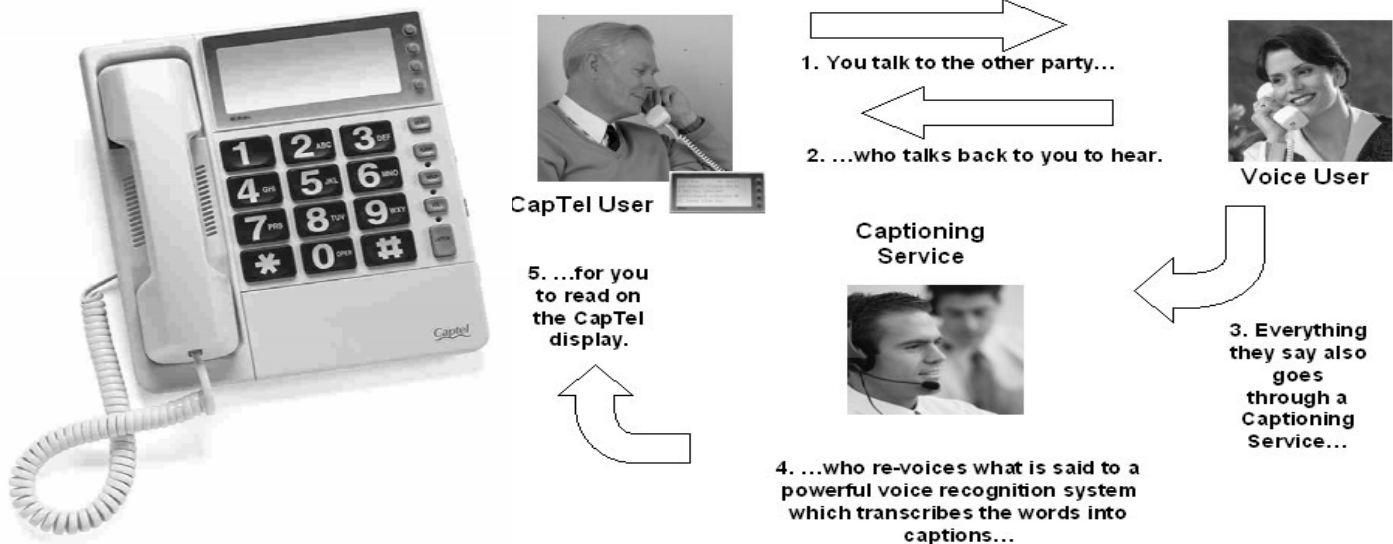
# Making the Environment Accessible

- Special Case: The phone
  - There are two approaches to helping people with hearing loss use the phone:
    - Making it louder
    - Adding text
  - Amplified phones are easy to get
    - 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**

ATAP Manager

A.I.D.B.

220 34th Street South

Birmingham, AL 35222

Phone: (205) 328-3989 (V/TTY)

Online: [www.alabamarelay.com/services\\_edp.php](http://www.alabamarelay.com/services_edp.php)

# 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, Dinning 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
    - 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

# Take Home Thoughts

- 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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