Hyperacusis Activities Treatment

Richard Tyler, Ph.D., CCC-A University of Iowa

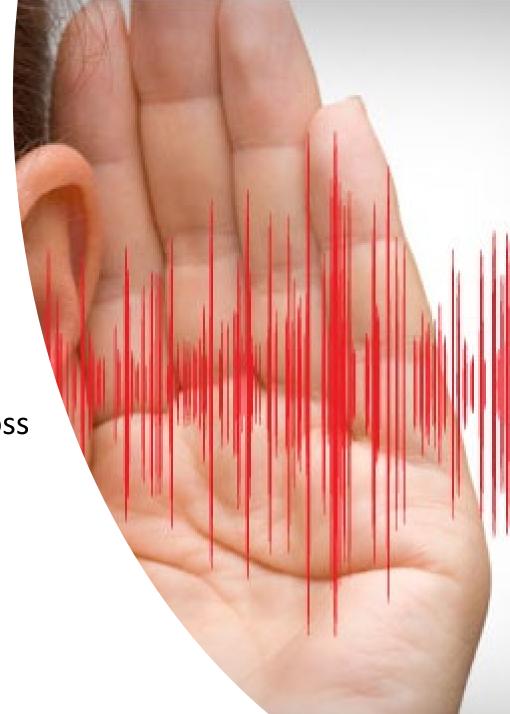
Ann Perreau, Ph.D., CCC-A Augustana College





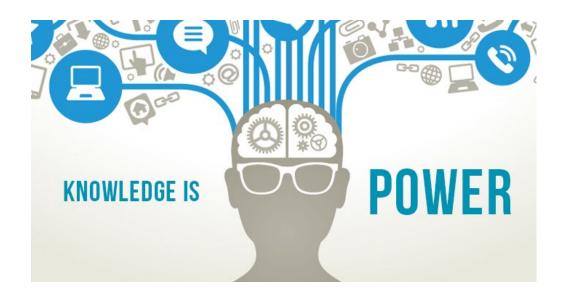
Overview

- Introductions
- Discuss experiences with hyperacusis
- Explain hearing, hearing loss and hyperacusis
- Review treatments for hyperacusis



Education

- Knowledge is the first step to successful management of your hyperacusis
 - How does hyperacusis affect you and in what environments it is most problematic?
 - What strategies are effective for managing your hyperacusis?
- Be confident in communicating your needs to others



What is hyperacusis?



- Reactions to moderately-loud sounds are too loud, annoying, fearful, and/or painful
 - Four types
- Affects 6-17% of general population
- Other terms that are used:
 - Misophonia
 - Select Sound Sensitivity

Types of hyperacusis

Loudness hyperacusis

Annoyance hyperacusis

Fear hyperacusis

Pain hyperacusis

Understanding your hyperacusis

- What is your hyperacusis experience?
- How long have you had hyperacusis?
- Does hyperacusis affect one or both ears?



Your reactions to sounds

- Are there any sounds that are too loud?
- Are there any sounds that are annoying?
- Are there any sounds that cause fear?
- Are there any sounds that create pain?



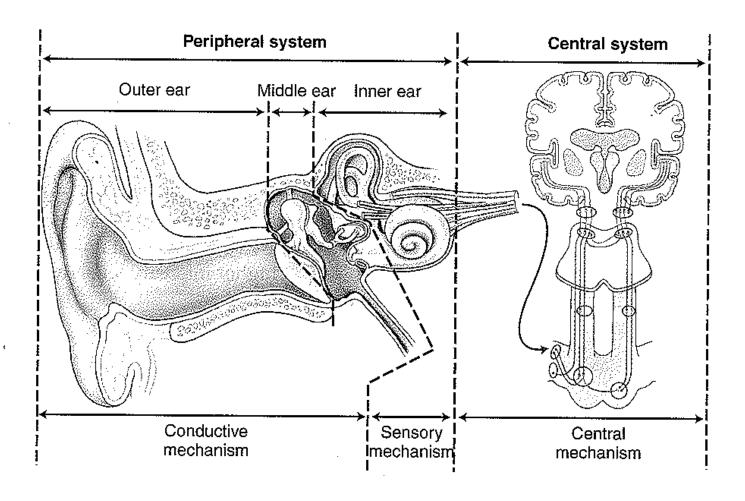
Your daily experience with hyperacusis

- Are there times during the day when you are particularly bothered?
- Are there times during the day when you are not bothered?
- How long do the episodes typically last after the triggering event?

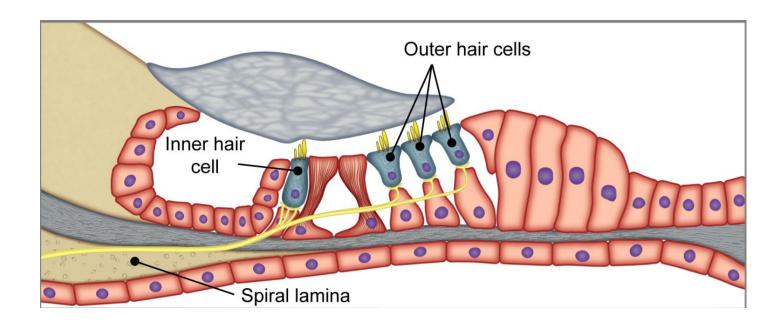


How do we hear?

•The Human Auditory System:

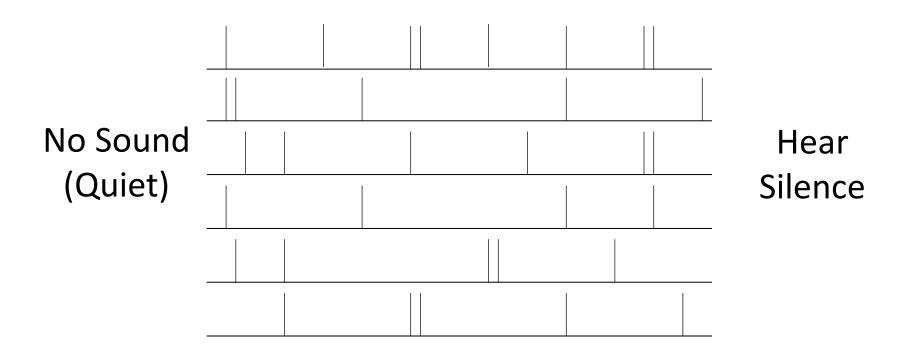


Hair cells in cochlea

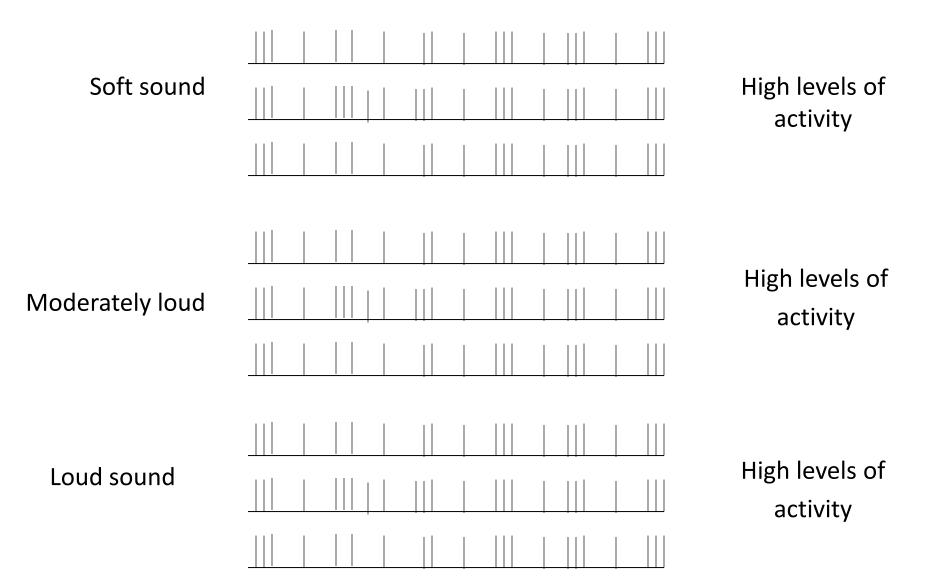


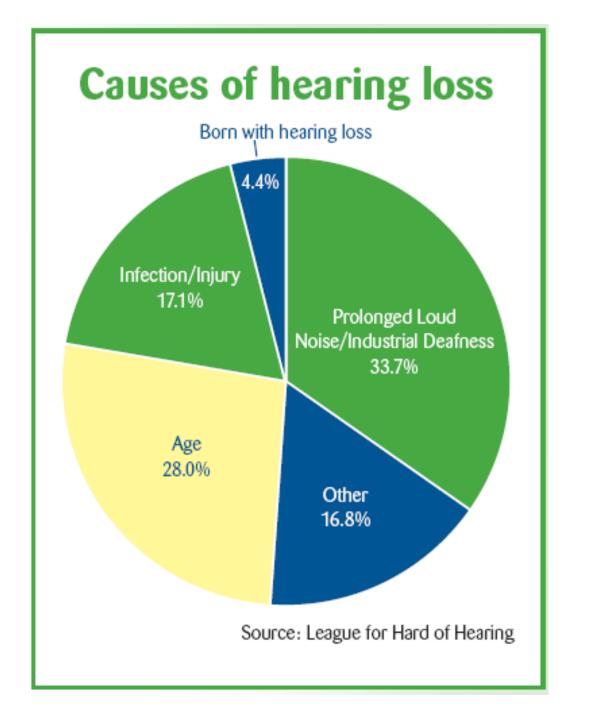
The Auditory Nerve carries information to the brain Hair Cell To Nerve **Brain Activity** Nerve **Fiber** Group session 11

Spontaneous Activity on Hearing Nerves

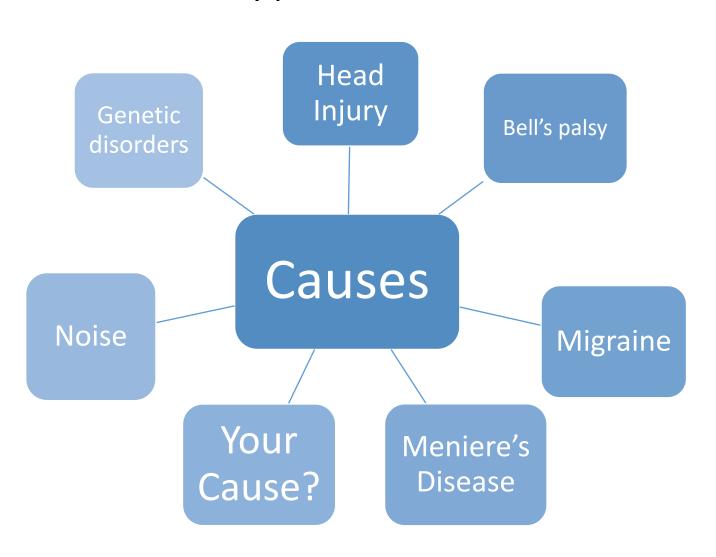


Hyperacusis Nerve Activity





There are many different causes of hyperacusis

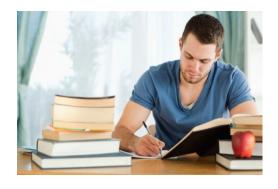


Reactions to hyperacusis (Tyler et al., 2014)

- Emotional well-being
- Hearing and communication
- Sleep
- Concentration









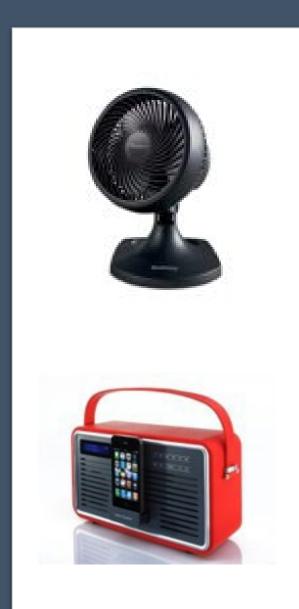
Options to treat hyperacusis

- Counseling (Hyperacusis Activities Treatment)
- Ear plugs
- Sound therapy
- Relaxation exercises
- Medications

Hearing protection

- Ear plugs reduce noise exposure
 - Wear in noisy environments
- Using ear plugs every day causes communication difficulties
- Ear plugs allow you to stay active, not be reclusive





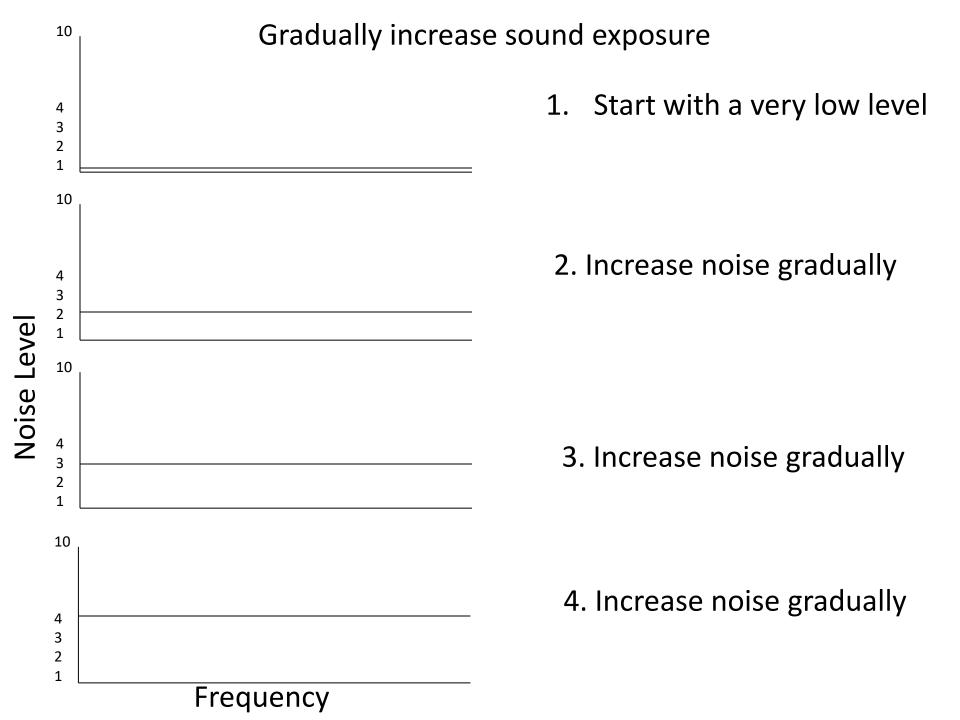
Sound Therapy

- Can be helpful for loudness and annoyance hyperacusis
- Options include non-wearable and ear-level sound generators
- Will take time for results

Sound Therapy Options

- Non-wearable sound generators
 - Sound Pillow
 - Sound Generators
 - Smartphone Apps
 - CDs, radio, etc
- Wearable, ear-level sound generators





Background sound partially masks a barking dog

















Progressive Muscle Relaxation

- Learn to systematically tense and relax groups of muscles
- With practice, you will recognize a tensed muscle vs. a relaxed muscle
- This skill allows you to produce physical muscular relaxation at the first signs of tension





Progressive Muscle Relaxation

Completed in two steps:

- Deliberately apply tension to certain muscle groups
- 2. Stop the tension and focus on how the muscles feel as they relax

Progressive Muscle Relaxation-Practice Exercise



- 1. Start with your arms
- Make a fist and tense your arms for 15 seconds
- Release the tension
- Breathe deeply and pay attention to the sensation of your arms relaxing

Practice Exercise--continued

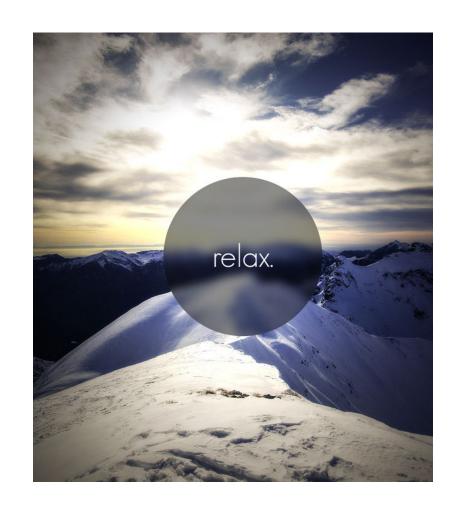
- 5. Continue tensing and relaxing the following muscle groups:
 - Face
 - Shoulders
 - Stomach
 - Legs and feet
- 6. When finished, release any remaining tension in your body

Deep breathing exercises

- Sit or lie flat in a comfortable position
- Put one hand on your belly just below your ribs and the other hand on your chest
- Take a deep breath in through your nose, and let your belly push your hand out
- Breathe out through pursed lips as if you were whistling
- Repeat 3 to 10 times

Visual Imagery

- Similar to daydreaming
- Attention is focused on some type of sensory experience
 - Creating novel mental images
 - Recalling past places and events





Visual Imagery - Practice Exercise

- 1. Close your eyes
- Think of a relaxing scene (the beach)
- Try to imagine the scene as clearly as you can
- 4. The smell of the water, warm sand on feet, sound of ocean
- Allow yourself to relax as you imagine the location in your mind

Medications

- Currently no drug or surgery can reliably eliminate the source of hyperacusis
- There are effective drugs for:
 - Sleep, anxiety, and depression





Questions?