



DoD Hearing Center of Excellence (HCE) Hearing Health Community Outreach Toolkit

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Agenda



- Hearing Health (HH) trends/stats
- Healthy People 2020 goals for HH
- Community Outreach Toolkit
 - ✓ Organizing an event
 - ✓ Goals of outreach
 - ✓ Materials/resources available for use
 - ✓ Apps available
 - ✓ Types of Community Outreach
 - ✓ Information booth
 - ✓ Fun 5K
 - ✓ Hearing loss/tinnitus self-help groups
 - ✓ Special population outreach
 - ✓ Use of social media
- Ways to provide the kit
- References

Hearing Health Trends/Stats



- Hearing Loss
- Tinnitus
- Comorbidities
- Healthy People 2020 goals for hearing health

Hearing Loss Trends in Adults



According to American Academy of Audiology (AAA), www.HowsYourHearing.org

- 36 million Americans have hearing loss
- 1 in 3 developed hearing loss from noise exposure
- 1 in 3 people over age 60 have hearing loss
- 1 in 2 people over age 85 have hearing loss
- By percentage:
 - √ 30-35% of adults between ages 65 and 75 suffer from hearing loss
 - ✓ 40-50% of adults age 75 and older suffer from hearing loss

Tinnitus Trends in Adults



According to the American Tinnitus Association (ATA), www.ata.org/understanding-facts

- 50 million Americans experience a form of tinnitus
- 15% of general US population
 - ✓ 20 million will have bothersome chronic tinnitus
 - ✓ 2 million will have severe psychological/emotional difficulties with their tinnitus

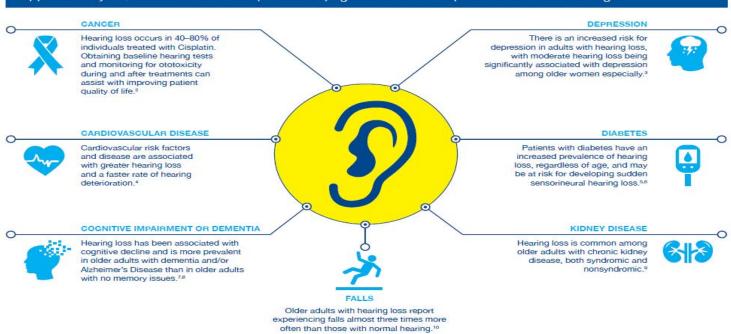


Comorbidities



Hearing Loss Comorbidities: Adults

Approximately 15% of American adults (37.5 million) aged 18 and over report some trouble hearing.1



Connect with an Audiologist Near You!

NAME, DEGREE CITY, STATE PHONE | EMAIL WEBSITE



Healthy People 2020 goals for Hearing Health (HH)



- Healthy People 2020 goals/data found at:
 - https://www.healthypeople.gov/2020/topics-objectives/topic/Hearing-and-Other-Sensory-or-Communication-Disorders/objectives#4408
- Healthy People provides 10-year national objectives for improving the health of all Americans
- 2020 goals are for a 10% improvement per 1000 population for the following:
 - ✓ Hearing
 - ✓ Tinnitus
- 2030 goals

Healthy People 2020 HH goals



■ Increase the proportion of persons with hearing impairments who have ever used a hearing aid or assistive listening devices or who have cochlear implants



Healthy People 2020 HH Goals



- Increase the proportion of persons who have had a hearing examination on schedule
 - ✓ Currently only 21.3 % of adults age 20-69 had a hearing exam in the past 5 years
 - ✓ Currently 40% of adults age 70 and older had a hearing exam in the past 5 years



Healthy People 2020 HH goals



- Increase the use of hearing protection devices
 - √ 45.9 adolescents per 1,000 age 12 to 18 had elevated hearing thresholds, or audiometric notches, in high frequencies (3, 4, or 6 kHz) in both ears, signifying noiseinduced hearing loss
 - √ 121.4 adults per 1,000 age 20 to 69 had elevated hearing thresholds, or audiometric notches, in high frequencies (3, 4, or 6 kHz) in both ears, signifying noise-induced hearing loss in 2003–04 (age adjusted to the year 2000 standard population)



Healthy People 2020 HH Goals



- Increase the proportion of adults bothered by tinnitus who have seen a doctor or other health care professionals
 - √ 44.5% of adults age 18 and older bothered by tinnitus in the past 12 months had seen a doctor
 - √ 45.8% of adults age 18 and older bothered by the onset of tinnitus in the past 5 years for whom they stated it was a moderate, big, or very big problem had seen or been referred to an audiologist or ENT physician
 - √ 14.7 percent of adults age 18 and older for whom tinnitus is a
 moderate to severe problem tried appropriate treatments

Community Outreach Toolkit Contents



- Information on organizing an event
- Helpful resources/links
- Types of outreach
- Helpful resources/links available for special population outreach
- Information on using social media

Community Outreach Toolkit Goals



- Objective: This toolkit is designed to be a resource for audiologists that want to promote hearing health in their communities through outreach events/activities
 - ✓ Important to have fun with your outreach
 - ✓ Materials in this toolkit are available and in most cases free to use
- Designing an outreach event/activity phases (based on the World Hearing Day toolkit): Preparation, Planning, Implementation, Evaluation/reporting
 - ✓ Preparation: Assembling your team and familiarizing yourself with resources available
 - ✓ Planning: Set objectives, id targeted community/audience, brainstorm, prioritize your ideas
 - ✓ Implementation: Promote your event
 - ✓ Evaluation and reporting
 - ✓ Link to the toolkit: https://www.who.int/deafness/world-hearing-day/World-Hearing-Day-Toolkit-for-planning-of-events.pdf?ua=1



Community/Audience Involvement



- Social-ecological model
 - ✓ Theory of understanding effects of personal and environmental factors that determine behaviors
 - ✓ Best hearing health prevention approach needs to address multiple levels of influence on health behaviors
 - ✓ Based on Theory at a Glance: A Guide For Health Promotion and Practice
 - ✓ https://www.ruralhealthinfo.org/toolkits/health-promotion/2/theories-and-models/ecological
 - ✓ 5 levels: Individual, Interpersonal, Community, Organizational, Policy/Enabling Environment
- Communities are complex social structures where all people live, work, socialize, learn and play (Hearing Health Care for Adults)
 - ✓ Types of communities: workplace, military bases, religious, neighborhoods, schools
 - ✓ Types of audiences: Military SMs, Veterans, patients, workers, professionals, students, senior citizens, young children

Material Researched



- 40+ sources evaluated
- Ease of use, pediatric focused, consumer materials, free/available for public use, reliable sources, website/materials currently updated
- Focused on organizations versus commercial product sites such as hearing aid manufacturers, cochlear implant devices, etc.



Community Outreach Toolkit



References with the most helpful brochures/fact sheets, sample press releases, videos available for free:

- American Academy of Audiology (AAA)
- American Speech-Language-Hearing Association (ASHA)
- DoD Hearing Center of Excellence (HCE)
- National Institute on Deafness and Other Communication Disorders (NIDCD)



American Academy of Audiology (AAA)



https://www.audiology.org/publications-resources/consumer-information/fact-sheets

Hearing Health Quick Test

Hearing Health Quick Test

- or crowded room? ☐ Yes ☐ No ☐ Sometimes
- 2. Do you sometimes feel that people 10. Do you feel handicapped by a are mumbling or not speaking clearly? □ Yes □ No □ Sometimes
- Do you experience difficulty fol-lowing dialog in the theater? □ Yes □ No □ Sometimes
- Do you sometimes find it difficult to understand a speaker at a pub-In meeting or a religious service? □ Yes □ No □ Sometimes
- 5. Do you find yourself asking people 13. Do you hear better with one ear
- □ Yes □ No □ Sometimes Do you find men's voices easier to understand than womer's:

 No No Sometimes

 14. Have you had any significant noise exposure during work, recreation, or military services.
- understanding soft or whispered speech? ☐ Yes ☐ No ☐ Sometimes
- 8. Do you have difficulty understand-ing speech on the telephone? □ Yes □ No □ Sometimes

- Do you find it difficult to follow a
 onversation in a noisy restaurant
 9. Does a hearing problem cause
 you to feel embarrassed when meeting new people? ☐ Yes ☐ No ☐ Sometimes

 - □ Yes □ No □ Sometimes Does a hearing problem cause you to visit friends, relatives, or neighbors less often than you
 - would like? ☐ Yes ☐ No ☐ Sometimes 12. Do you experience ringing or
 - noises in your ears? □ Yes □ No □ Sometimes
 - □ Yes □ No □ Sometimes
 - ☐ Yes ☐ No 15. Have any of your relatives (by birth)

□ Yes □ No

If you think you may have a hearing loss, visit www.HowsYourHearing.org

with an audiologist in your area to get your hearing checked.

and click on the "Find an Audiologist" link to locate and set up an appointment

- 2 points for Yes
- 1 point for Sometimes O points for No
- Scores of 3 or more: May mean that you have a hearing problem. Scores of 6 or more: Strongly suggest that a hearing check is

- · Exposure to excessive loud noise
- · Ear infections, trauma, or ear disease.

- . Wear hearing protection when around loud sounds. There are different types of hearing protection such as foam earplugs, earmuffs and custom hearing protection devices. Contact your local audiologist for custom hearing
- . Turn down the volume when listening to the radio, the TV, MP3 player, or anything through ear buds and
- . And, other than hearing protection, do not put anything in your earl

Blackwell DL, Lucas JW, Clarke TC, Summary health statistics for U.S. adults: National health interview survey, 2012 (PDF). National Center for Health Stansacs, Vital Health Stat 10(250), 2014.

*Lin FR, Niparko JK, Ferrucci L, Hearing loss prevalence in the United States, Arch Intern Med. 2011 Nov 14: 171(20: 1851-1852.

Fact Sheets about Hearing Loss

Facts About Hearing Loss



Approximately 37.5 million Americans suffer from hearing loss.

Hearing loss affects people of all ages—one in eight people over 12 years of age in the United States has significant hearing loss, * Hearing loss is the third most common health problem in the United States. Untreated hearing loss can affect your ability to understand speech and can negatively impact your social and emotional well-being—hearing impairment can decrease your quality of life!

Signs you may have a hearing loss:

- . Difficulty hearing people in noisy environments such as a restaurant, shopping mall, in cars, or at the movie
- · People seem to "mumble" all the time.
- . Family, friends, or colleagues often need to repeat themselves when speaking with you
- · You have trouble hearing people when they are not facing you or are in another room.
- You have trouble following conversations
- · You have ringing, buzzing, or hissing sounds in your ears.

- Damage to the inner ear and ear drum from contact with a foreign object (cotton swabs, bobby pins, etc.).
- . Deteriorating hearing due family history, noise exposure, or age

How to protect your hearing:

Customizable Press Releases on Hearing Loss

[YOUR LOGO HERE]

Contact: First Name Last Na

FOR IMMEDIATE DELEASE

Over 36 million American adults have some degree of hearing loss. That is over 4 times the amount of people who live in New York City.

(CITY, STATE-DATE) - The statistics are shocking and even more so knowing that over half of those 36 million Americans are under the age of 65. Hearing loss is an increasing health concern in this nation that is often preventable. Taking time to see an audiologist for regular hearing screenings and knowing the signs of hearing loss can protect your hearing. Make an appointment with an audiologist this October during National Audiology Awareness Month.

"Hearing loss can be caused by exposure to loud noises, ear infections, trauma, or ear disease; harm to the inner ear and ear drum, illness or certain medications, and deterioration due to the normal aging process," explains [AUDIOLOGIST, TITLE]. The amount of noise Americans are exposed to today plays an important role in the recent increase of hearing loss across the nation. It is no longer just a

Have you stopped going to restaurants and social gatherings? Do you keep to yourself when in noisy environments? If you answered yes, you may have a hearing problem. Some tell signs of hearing loss are: trouble hearing conversation in a noisy environment such as restaurants, difficulty or inability to hear people talking to you without looking at them, and/or a constant pain or ringing in your ears.

On average, most Americans don't know how to recognize the first signs of hearing loss or which health professional is qualified to diagnose and treat the condition. If you think you may have a hearing loss, you need to see an audiologist.

An audiologist is a licensed and clinically experienced health-care professional who specializes in evaluating, diagnosing, and treating people with hearing loss and balance disorders. The first step in treatment of a hearing problem is to get your hearing evaluated by an audiologist. A hearing evaluation will determine the degree of hearing loss you have and what can be done. Although most hearing loss is permanent, an audiologist can determine the best treatment, which may include hearing aids, assistive listening devices, and hearing rehabilitation.

In response to the growing number of Americans suffering from hearing loss, the American Academy of Audiology in conjunction with [ORGANIZATION] have launched National Audiology Awareness Month this October.

[ORGANIZATION]'s audiologists have a variety of specialties to include, but not limited to:

example: Prescribing and fitting hearing aids example: Assisting with cochlear implant programs

For more information or to schedule an interview, contact us at [CONTACT INFORMATION]

[INSERT 100 WORD PARAGRAPH ON NEXT PAGE ABOUT YOUR ORGANIZATION]



American Speech-Language-Hearing Association (ASHA)



https://www.asha.org/public/ https://www.asha.org/aud/pei/

Patient Information Handouts Available in English and Spanish



AUDIOLOGY INFORMATION SERIES

Unilateral Hearing Loss

Unilateral Hearing Loss

Unilateral hearing loss (UHL) is having an ear with no hearing loss and hearing loss recorded in the other ear. The hearing loss can vary from slight to very severe. UHL can occur at any age. Children with UHL may have problems with school, speech-language development, and social—emotional skills. UHL is difficult to diagnose because the individual may not notice that they have problems hearing in one ear.

Individuals with UHL who have problems hearing may

- · get easily frustrated;
- seem overly tired at the end of the day;
- · appear not to be paying attention; and/or
- respond incorrectly to questions or requests.

Talk to an audiologist if you notice these problems in yourself or your loved one.

UHL can cause a number of difficulties in day-today living. If you or a loved one has UHL, one of the following issues may be going on:

- The individual has trouble finding out where sounds are coming from; this is known as jocalization. Localization is important when listening in groups of people. Localization is also important for safety, For example, if you cannot localize a car horn, you cannot move out of the way. This may impact children who are learning how to ride a bike or anyone who is driving a car.
- The individual has difficulty understanding what people are saying in noisy situations such as in the classroom, at work, or in a restaurant. Problems hearing speakers from another room or from outside are common. Speech can be heard but can be difficult to understand.

Causes of UHL may include

- · hearing loss that runs in the family (genetic or hereditary);
- some syndromes;
- certain illnesses
- head injury; and
- exposure to loud noise

Will a hearing aid help?

Some people with UHL benefit from using a hearing aid. It depends on age, amount of hearing loss, and listening demands. Talk with your audiologist about other hearing technologies that may or may not be an option. Your audiologist will help you decide what option will best meet your listening needs.

How can I help?

- Notice how you are sitting. Talk to others or listen with the "normal" ear facing that person.
- Limit background noise—such as the dishwasher, window air conditioner, fan, TV, or radio—when talking.
- Make eye contact when talking.
- Use facial expressions, such as smiling or frowning.
- . Do not talk from another room.

How can I help protect hearing?

- Loud sounds or ear infections can cause additional hearing loss to individuals with UHL.
- An ear infection may make it harder to hear. Talk to your doctor if you have concerns.
- Wear properly fitting earplugs or earmuffs when attending fireworks, concerts, sporting events, or other places with
- · Have your hearing checked regularly by an audiologist
- Keep the lowest volume possible with personal sound devices. TV, and radio.



La mayor asociación de profesionales de audiología SERIE INFORMATIVA DE AUDIOLOGÍA

La pérdida de audición unilateral

La pérdida de audición unilateral

La pérdida de audición unilateral ocurre cuando existe pérdida auditiva en un oído, pero no en el otro. La pérdida de audición puede variar de leve a grave y ocurrir a cualquier edad. Los niños con pérdida de audición unilateral pueden tener problemas en la escuela, con el desarrollo del habla y el lenguaje, y con las aptitudes sociales y emocionales. La pérdida de audición unilateral es difficil de diagnosticar, porque es posible que la persona no note que tiene problemas de audición en un oído.

Es posible que las personas con pérdida de audición unilateral que tienen dificultad para oír

- se frustren con facilidad;
- estén demasiado cansadas al final del día;
- parezcan no prestar atención; o
- respondan de manera incorrecta cuando se les pide o pregunta algo.

Consulte a audiólogo si nota que usted o un ser querido tiene estos problemas.

La pérdida de audición unilateral puede causar una serie de dificultades en la vida cotidiana. Si usted o un ser querido tiene una pérdida de audición unilateral, es posible que:

- Tenga dificultad para saber de dónde proviene los sonidos; esto se conoce como localización. La localización es importante cuando se escucha en grupos de personas. También es importante para la seguridad. Por ejemplo, si no puede localizar de dónde proviene el bocinazo de un automóvil, no se puede apartar del camino. Esto puede afectar a los niños que están aprendiendo a montar en bicicleta o a las personas que se hallan tras el volante de un automóvil.
- Tenga dificultad para comprender lo que se dice en situaciones ruidosas como en el aula, en el trabajo o en un restaurante. Es frecuente tener dificultad para oír a las personas que hablan desde otra habitación o desde afuera. Se oye lo que se dice, pero es dificil entender.

Las causas de la pérdida de audición unilateral incluven

- la pérdida de audición de familia (genética o hereditaria);
- algunos síndromes;
- ciertas enfermedades
- las lesiones en la cabeza; y
- la exposición al ruido fuerte.

¿Ayudaría un auxiliar auditivo?

Algunas personas con pérdida de audición unilateral se pueden beneficiar del uso de un auxiliar auditivo. Depende de la edad, el grado de pérdida auditiva y las necesidades de audición. Consulte a audiólogo acerca de otras posibles opciones de tecnología auditiva. El audiólogo le ayudará a decidir qué opción será la más apropiada para satisfacer sus necesidades de audición.

¿Cómo puedo ayudar?

 Preste atención a la forma en que se sienta.
 Converse con el oído "normal" de frente a su interlocutor.

Audiology Information Series © ASHA 2018 25725 Serie Informativa de audiología © ASHA 2018 25725

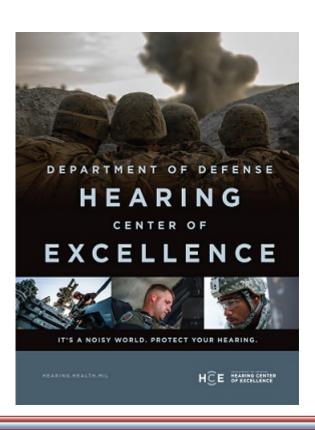


DoD Hearing Center of Excellence (HCE)



https://hearing.health.mil/Prevention/Comprehensive-Hearing-Health-Program-Info-and-Materials

CHHP brochures



DOD HCE Public Service Annoucements DVD-Video



HCE Posters

N N	DECIBELS (LOUDNESS)	DAMAGE OCCURS WHEN EXPOSURE TIME EXCEEDS	LEVELS RECORDED TODAY Groun Hair Coll = Hoalth Rair Cell - Tellow = Damaged Red = feversely Durneged - Black - Daniel
3	BELOW 85	SAFE	
별		8 Hrs	
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QI	103	8 Min	
	106	4 Min	
	109	2 Min	
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	115	30 Sec	21.00 **



National Institute on Deafness and Other Communication Disorders (NIDCD)



https://www.nidcd.nih.gov/health

Interactive Hearing Test
Shareable Link

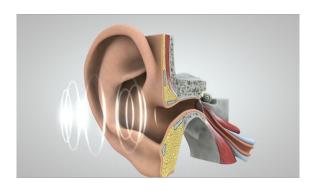


Fact Sheets in English and Spanish



Journey of Sound to the Brain Video Link:

https://www.nidcd.nih.gov/health/journey-ofsound-video







Hearing Loss:

- American Academy of Audiology (AAA)
- American Speech-Language-Hearing Association
- DoD Hearing Center of Excellence (HCE)
- Hearing Health Foundation
- Hearing Loss Association of America (HLAA)
- National Institute on Deafness and Other Communication Disorders (NIDCD)



NoiseInduced
Hearing
Loss/Hearing
Conservation
Program
Education:

- Council for Accreditation Occupational Hearing Conservationist (CAOHC)
- DoD Hearing Center of Excellence (HCE)
- Hearing Education Awareness for Rockers (HEAR)
- National Institute of Occupational Safety and Health (NIOSH)
- Occupational Safety and Health Administration (OSHA)



Tinnitus:

- American Academy of Audiology (AAA)
- American Speech-Language-Hearing Association (ASHA)
- American Tinnitus Association (ATA)
- DoD Hearing Center of Excellence (HCE)
- Ida Institute (must sign up for a free account)

https://idainstitute.com/tools/tinnitus/

Tinnitus



- Demographic information to consider for outreach
- National Health and Nutrition Examination Survey 2011-2012 Data Documentation, Codebook, and Frequencies
 - √ https://wwwn.cdc.gov/nchs/nhanes/2011-2012/AUQ G.htm
- Shargorodsky, Curhan, and Farwell's 2010 analysis, *Characteristics of Tinnitus among U.S. Adults*, originally published in the American Journal of Medicine
 - ✓ High Risk Groups:
 - ✓ Senior Citizens
 - ✓ Active duty military and veterans
 - ✓ People employed in loud workplace environments
 - ✓ Musicians and music lovers
 - ✓ Motorsports and hunters
 - ✓ People with a prior behavioral health issues

Consumer Apps Available



Hearing Screening apps

- Easy Hearing Test (displays hearing test on audiogram)
- Mimi Hearing Test (displays hearing in categories/percentage and on audiogram)
- Audicus (displays at percentage for high, mid and low frequencies)
- MFA Hearing Test (relates hearing to a person's age)
- Hear WHO (uses detection to numbers under noise, if you score below 50 then hearing loss is present, score of 50-75 check hearing regularly, score above 75 hearing is good)

Noise Measurements

- Decibel X
- NIOSH SLM



Consumer Apps Available



Tinnitus

- Tinnitus Relief (sound therapy only)
- Widex Zen Tinnitus (relaxation strategies along with sound therapy)
- Resound Relief (added charge for personalized plan)
- Oticon Tinnitus Sound (relaxation strategies along with sound therapy)

Hearing Conservation/CAPD

- WHHIP
- HEAR (Android only)
- Hear Coach

Types of Community Outreach-Information Booth



■ Information Booth

- ✓ Brochures/materials/sample news releases available
- ✓ Demos: hearing aids, assistive listening devices like amplified telephones, pocket talkers
- ✓ Promotional materials/freebies
 - ✓ Posters/banners, models and keychains
 - ✓ Blue Tree Publishing http://www.bluetreepublishing.com/
 - ✓ Oaktree Products https://www.oaktreeproducts.com/educational-materials
 - √ Variety of earplugs
 - ✓ Business cards
 - ✓ Other freebies like pens, keychains, phone holder

Types of Community Outreach-Fun 5K



- Find a course, information about organizing a 5K
 - ✓ 5Kevents.org, does require a membership to register your event and marketing tips
 - ✓ Raceentry.com, free to create a race map and event, tips for marketing/sponsoring your race
 - ✓ Runningintheusa.com, advertise races for free
 - ✓ Eventbrite to post an event, provide tickets, advertisement

Considerations

- ✓ Incorporate fun facts/scavenger hunt for walkers
- ✓ First aid stations/hydration stations/portable restrooms/security
- ✓ Special considerations: Handicaps/disabilities
- ✓ Sell tickets, <u>www.eventbrite.com</u>, helps set up an event
- ✓ Location of run
- ✓ Race timing/Race permits
- ✓ Raffles/contests to incorporate, T-shirts, finisher medals/awards, food/drinks after
- ✓ Types: Glow in the Park, color runs, costumes, different themes

Fun 5K



Causes

- ✓ Hearing loss awareness
- ✓ Tinnitus awareness
- ✓ Hearing Loss Association of America Walk4Hearing
 http://hlaa.convio.net/site/PageServer?pagename=walk home page,
- ✓ World Hearing Day 3 March
- ✓ May is Better Speech and Hearing Month
- ✓ October is National Audiology Awareness Month/National Protect your Hearing Month



Types of Community Outreach-Self-Help Groups



- Patients with hearing loss/tinnitus, parents of children with hearing loss
- Traditionally held by HLAA volunteers or universities with speech and hearing centers
- Topics to cover: icebreakers, stress reduction, self-advocacy, communication strategies, information on assistive listening devices
- Websites/apps to help organize:
 - ✓ Meetup Website/App https://www.meetup.com
 - ✓ Website/app that organizes online groups that host in-person events for people with similar interests
 - ✓ Ida Institute https://idainstitute.com/tools/group/get_started/
 - ✓ Group Rehabilitation Online Utility Pack (GROUP), 2 or 8 session program
 - ✓ Provides information of planning and facilitating Self-Help/Group AR sessions
 - ✓ American Tinnitus Association https://www.ata.org/news/events
 - ✓ Lists location and date/time of support group meetings

Special Population outreach



■ Pediatric

- ✓ Infants
- ✓ School-age
- ✓ Teens

■ Other Specialized Resources

- ✓ Blogs/webinars/webcasts for professionals
- ✓ Special ENT concerns



Pediatric Activities/Outreach



- Stats
- Pediatric Outreach
 - ✓ AAA Turn it to the Left
 - ✓ Dangerous Decibels
 - ✓ NIH Noisy Planet
 - ✓ ASHA Healthy Communication and Popular Technology Initiative
 - ✓ Bose apps/activities
 - ✓ Jolene

Pediatric Stats/Trends



According to AAA

- Approximately 6 out of 1000 babies are born with significant hearing problems at birth
- More than 4000 babies are born with hearing loss every year
- Approximately 12% of children ages 6-19 have noise-induced hearing loss

Hearing Loss Comorbidities



Hearing Loss Comorbidities: A Childhood Timeline

CONGENITAL HEARING LOSS

The Joint Commission on Infant Hearing recommends hearing screening by one month, diagnostic evaluation by three months, and early intervention by six months to facilitate identification and treatment of hearing loss in infants.¹

Children identified with hearing loss before six months have better language outcomes than children who are identified after six months.^{2,3} These effects can be seen in children as old as 3 years or older.³

EAR INFECTIONS IN TODDLERHOOD

Transient hearing loss is common in toddlers and young children.⁵ It is typically associated with middle-ear dysfunction that can be active ear infections or noninfected middle ear fluid.

Long-term untreated middle-ear dysfunction can impact hearing and ultimately impact speech and language development. 6,7

AAO (2016) recommends an age-appropriate hearing evaluation for any child experiencing otitis media that persists for three months or longer.⁸

NOISE EXPOSURE

12.5% of 6 to 19-year-olds (6.8 million) and 16.8% of 12 to 19-year-olds (5 million) in the United States have documented evidence of elevated hearing thresholds directly attributed to noise exposure.¹⁰

Teens are exposed to dangerous levels of sounds in many different ways. Ask your patients about recreational noise exposure including use of personal music devices. The Academy recommends wearing hearing protection when around sounds louder than 85 dB.

1 month 3 mon

3 months 6 months

1 year

11 years

12 years

19 years

Infants

Congenital cytomegalovirus (CMV) is estimated to cause 15–25% of congenital sensorineural hearing loss.4

Toddlers to Pre-Teens

Certain infections, anatomical abnormalities, and genetic conditions can be associated with late-onset or progressive hearing loss.⁹

Children of all ages and developmental status can have their hearing tested. No child is too young. There is a test to accommodate all abilities.

Teens & Young Adults

Noise-induced hearing loss is not reversible, but is preventable. Talk to your patients about wearing hearing protection, turning down the volume, and walking away from loud noises.



Pediatric

- AAA Turn it to the Left
- Dangerous Decibels
- NIDCD Noisy Planet
- Ida Institute
- Boys Town National Research Hospital



AAA Turn it to the Left http://www.turnittotheleft.com/

- ✓ Coloring pages/ear diagrams
- ✓ Fun facts

Dangerous Decibels http://dangerousdecibels.org/

- ✓ Curriculum/Modules: workshops give you the curriculum, classroom materials and script to follow, designed for 4th graders
- ✓ Activities: Hearing loss simulator game
- ✓ Research on changing knowledge, attitudes and behaviors of school-age children
- ✓ Resources:
 - ✓ Coloring pages: http://dangerousdecibels.org/wp-content/uploads/2010/04/Dangerous-Decibels-Coloring-Sheets.pdf
 - ✓ Educator Guidebook: http://dangerousdecibels.org/wp-content/uploads/2010/04/Educator-Resource-Guide-2010.pdf



NIDCD Noisy Planet https://www.noisyplanet.nidcd.nih.gov/

- ✓ National Institutes of Health
- ✓ Increase awareness among parents of children ages 8 to 12 about the causes and prevention of noise-induced hearing loss
- ✓ Shareable images and downloads including seasonal themes
- ✓ Demonstration videos
- ✓ Fact Sheets and posters
- ✓ Games: All About Noise crossword puzzle, Test Your Noise Knowledge quizzes
- ✓ Teacher Toolkit with PowerPoint and script



Boys Town National Research Hospital:

https://www.boystownhospital.org/hearingservices/Pages/default.aspx

- ✓ Newborn Hearing Screening information: https://www.babyhearing.org/ or https://www.audiciondelbebe.org/ (Spanish site)
 - ✓ Resources geared toward infant hearing loss
 - ✓ Parenting and support section
 - ✓ Information of counseling families with children with hearing loss
 - ✓ Fact Sheets on Newborn Hearing Screening developed in conjunction with the American Academy of Pediatrics
 - ✓ Information on Universal Newborn Hearing Screening tests
 - ✓ Genetics of childhood hearing loss
 - ✓ Hearing aid and cochlear implant information



- Bose activities/apps https://build.bose.com/
 - ✓ Bose Build speaker cube, \$69.00
 - ✓ Bose Build headphones, \$99.00
 - ✓ Bose Build apps free with activities that teach children
 about sound and science





Jolene



- Jolene Cookbook
 - √ http://dangerousdecibels.org/jolene/cookbook/
 - ✓ Facebook page: https://www.facebook.com/jolene.ohsu
- Uses: Awareness of noise-induced hearing loss in schools, universities, health fairs









Other Specialized Resources



- Blogs/webinars/webcasts
 - ✓ Hearing Review
 - ✓ Hearing Health Foundation
 - ✓ Mayo Clinic Group Hearing Loss discussions:
 https://connect.mayoclinic.org/group/hearing-loss/#
- Ida Institute My World, pediatric counseling tools available to help children talk about their hearing loss
 - ✓ Toolkit available for purchase through Ida Institute
 - √ https://idainstitute.com/tools/my_world/
- Supporting Success for Children with Hearing Loss
 - ✓ Link: https://successforkidswithhearingloss.com/
 - ✓ Resources for Parents and Teachers

Other Specialized Resources



■ Ear Community

- ✓ Nonprofit organization that helps children and adults born with microtia and atresia
- ✓ Brochure link: https://earcommunity.org/about/ear-community-brochure/
- ✓ Summer Family Picnics
 - ✓ Hosts picnics each year around the world to bring together
 Microtia and Atresia families
 - ✓ Link to locations of summer picnics:
 https://earcommunity.org/events/2019-picnics-and-events/
- ✓ Useful information on emotional support, hearing loss information, treatment options, technology available

Other Specialized Resources



- American Cochlear Implant Alliance
 - ✓ Advocate for the cochlear implant community and sponsors research
 - ✓ All ages, specifically for patients in the US
 - ✓ Fact Sheets on cochlear implants
 - ✓ Awareness movie: The Listening Project Film
 - ✓ Available for purchase https://www.collectiveeye.org/products/the-listening-project-home-use?variant=6445273350171
 - ✓ 20 minute version for schools
 - ✓ Full-length version is 38 minutes long
- ASHA Information Series https://www.asha.org/uploadedFiles/AIS-Cochlear-lmplants.pdf



Use of Social Media



- Posts should be clear of misconceptions
 - ✓ Hearing loss has been depicted using images such as an older person cupping his or her hand around an ear or using an ear trumpet
 - ✓ A person who completely misunderstands a conversation and responds inappropriately
 - ✓ A person shouting at someone with some degree of hearing loss (Hearing Health Care for Adults)
- Good examples of public education and advocacy
 - ✓ Most effective: large scale and multifaceted, have a specific goal, involve a range of outreach activities, stakeholders and sponsors, educational materials, use of social media messaging, lobbying efforts to change laws or policies (Hearing Health Care in Adults)
 - ✓ Example of Public Awareness Campaigns: Don't Mess with Texas
- Types of social media platforms: Facebook, YouTube, SnapChat, Instagram, Twitter, Pinterest, LinkedIn
 - ✓ DoD providers contact Public Affairs office prior to posting for review of content
- Consider adding 1-2 hashtags to your post
- Actively engage with your audience--never ignore any comments
- https://www.audiology.org/practice_management/resources/utilizing-social-media-2018

Ways to Provide the Kit



■ Toolkit includes PowerPoint, word document with links to most helpful resources named during the presentation according to topic

- Where it is located
 - ✓ DoD Hearing Center of Excellence
 - ✓ Link: https://hearing.health.mil/Resources
 - ✓ Providers tab



Hearing health trends/stats:

American Academy of Audiology (AAA): http://www.howsyourhearing.org/, http://www.howsyourhearing.org/, http://www.howsyourhearing.org/, http://www.howsyourhearing.org/,

American Speech-Language-Hearing Association (ASHA): https://www.asha.org/public/

American Tinnitus Association (ATA): https://www.ata.org/

Cochlear Center for Hearing and Public Health: https://jhucochlearcenter.org/hearing-loss.html

Hearing Health Foundation: www.hearinghealthfoundation.org

Hearing Health and Technology Matters: https://hearinghealthmatters.org/

Hearing Industries Association: https://www.hearing.org/

Hear-it: https://www.hear-it.org/

Hearing Loss Association of America (HLAA): www.hearingloss.org

National Institute of Health/National Institute on Deafness and Other Communication Disorders (NIDCD):

www.nidcd.nih.gov

National Institute for Occupational Safety and Health (NIOSH): www.cdc.gov/niosh/index

United States Preventative Services Task Force (USPSTF): www.uspreventativeservicestaskforce.org

World Health Organization (WHO): www.who.int

Healthy People 2020 goals: https://www.healthypeople.gov/2020/topics-objectives/topic/Hearing-and-Other-Sensory-or-

Communication-Disorders/objectives#4408



Organizing an event:

National Cancer Institute (U.S.). (2005). *Theory at a glance: A guide for health promotion practice*. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health.

Toolkit for World Hearing Day, link: https://www.who.int/deafness/world-hearing-day/World-Hearing-Day-Toolkit-for-planning-of-events.pdf?ua=1

The National Academies of Sciences, Engineering, and Medicine. (2016). *Hearing Health Care for Adults: Priorities for Improving Access and Affordability*. Washington, DC: The National Academies Press.



References with the most helpful brochures/fact sheets, sample press releases, videos available for free:

American Academy of Audiology (AAA): https://www.audiology.org/publications-resources/consumer-information/fact-sheets

American Speech-Language-Hearing Association (ASHA):

https://www.asha.org/public/, https://www.asha.org/aud/pei/

Department of Defense Hearing Center of Excellence (HCE):

https://hearing.health.mil/Prevention/Comprehensive-Hearing-Health-Program-Infoand-Materials

National Institutes of Health/National Institute on Deafness and Other Communication Disorders (NIDCD): https://www.nidcd.nih.gov/health



By topic:

Hearing loss

American Academy of Audiology (AAA): http://www.audiology.org

American Speech-Language-Hearing Association (ASHA):

https://www.asha.org/public/

DoD Hearing Center of Excellence: https://hearing.health.mil/

Hearing Health Foundation: www.hearinghealthfoundation.org

Hearing Loss Association of America (HLAA): www.hearingloss.org

National Institutes of Health/National Institute on Deafness and Other Communication

Disorders (NIDCD): www.nidcd.nih.gov



By topic:

Noise-induced hearing loss/hearing conservation program education

Council for Accreditation for Occupational Hearing Conservation (CAOHC): www.caohc.org

DoD Hearing Center of Excellence (HCE): https://hearing.health.mil

Hearing Education and Awareness for Rockers (HEAR): www.hearnet.com

National Institute for Occupational Safety and Health (NIOSH):

www.cdc.gov/niosh/index

Occupational Safety and Health Administration (OSHA): www.osha.gov



By topic:

Tinnitus

National Health and Nutrition Examination Survey-2011-2012 Data Documentation, Codebook, and Frequencies Audiometry (AUQ_G) Data File: AUQ_G.xpt. Available from: https://wwwn.cdc.gov/nchs/nhanes/2011-2012/AUQ_G.htm

Shargorodsky, Josef et al. 2010. "Prevalence and Characteristics of Tinnitus among US Adults." The American Journal of Medicine 123 (8): 711-718.

American Academy of Audiology (AAA): http://www.audiology.org

American Tinnitus Association (ATA): https://www.ata.org/

DoD Hearing Center of Excellence: https://hearing.health.mil/

Ida Institute: https://idainstitute.com/tools/tinnitus/



Types of Community Outreach:

Information booth

Blue Tree Publishing: http://www.bluetreepublishing.com/

Oaktree Products: https://www.oaktreeproducts.com/educational-materials

Fun 5K

5K events: http://5kevents.org/

Race Entry: https://www.raceentry.com//

Running In The USA: https://www.runningintheusa.com/

Eventbrite: www.eventbrite.com

Self-help groups

Ida Institute https://idainstitute.com/tools/group/get_started/
American Tinnitus Association https://www.ata.org/news/events
Meetup https://www.meetup.com



Special population outreach:

Alexander Graham Bell Association for the Deaf and Hard of Hearing: https://www.agbell.org/

American Academy of Audiology (AAA): http://www.howsyourhearing.org/, http://www.howsyourhearing.org/, http://www.howsyourhearing.org/, http://www.howsyourhearing.org/,

American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS): https://www.enthealth.org/

American Cochlear Implant (ACI) Alliance: www.acialliance.org

American Speech-Language-Hearing Association (ASHA): https://www.asha.org/public/

Boystown Hospital: https://www.boystownhospital.org/hearingservices/Pages/default.aspx,

https://www.babyhearing.org/

Dangerous Decibels: www.dangerousdecibels.org

Ear Community: www.earcommunity.org

Educational Audiology Association (EAA): https://edaud.org/

Ida Institute: www.idainstitute.com

National Institutes of Health/National Institute on Deafness and Other Communication Disorders (NIDCD):

www.nidcd.nih.gov

Supporting Success for Children with Hearing Loss: www.successforkidswithhearingloss.com



Use of social media:

American Academy of Audiology (AAA):

https://www.audiology.org/practice_management/resources/utilizing-social-media-2018

The National Academies of Sciences, Engineering, and Medicine. (2016). *Hearing Health Care for Adults: Priorities for Improving Access and Affordability*. Washington, DC: The National Academies Press.

Ways to provide the kit:

DoD Hearing Center of Excellence: https://hearing.health.mil/Resources

Questions







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OF EXCELLENCE