Hearing Loss and Tinnitus

Instructor Lesson Plan

Time Required: 2 Hours

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| Lesson Description | |
| The information below provides the instructor with an overview of the lesson and the materials that are required to effectively present this instruction. | |
| TMS # | 3890955 |
| Prerequisites | Prior to this lesson, the Veteran Service Representatives VSRs should have 12 months of VSR experience. |
| target audience | The target audience for Hearing Loss and Tinnitus is VSR Post Challenge.  Although this lesson is targeted to teach the VSR Post Challenge employee, it may be taught to other VA personnel as mandatory or refresher type training. |
| Time Required | 2 hours |
| Materials/ TRAINING AIDS | Lesson materials:   * Hearing Loss and Tinnitus PowerPoint Presentation * Hearing Loss and Tinnitus Trainee Handout |
| Training Area/Tools | The following are required to ensure the trainees are able to meet the lesson objectives:   * Classroom or private area suitable for participatory discussions * Seating, writing materials, and writing surfaces for trainee note taking and participation * Handouts, which include a practical exercise * Large writing surface (easel pad, chalkboard, dry erase board, overhead projector, etc.) with appropriate writing materials * Computer with PowerPoint software to present the lesson material   Trainees require access to the following tools:   * VA TMS to complete the assessment * Hearing Loss and Tinnitus Student Handout |
| Pre-Planning | * Become familiar with all training materials by reading the Instructor Lesson Plan while simultaneously reviewing the corresponding PowerPoint slides. This will provide you the opportunity to see the connection between the Lesson Plan and the slides, which will allow for a more structured presentation during the training session. * Become familiar with the content of the trainee handouts and their association to the Lesson Plan. * Practice is the best guarantee of providing a quality presentation. At a minimum, do a complete walkthrough of the presentation to practice coordination between this Lesson Plan, the trainee handouts, and the PowerPoint slides and ensure your timing is on track with the length of the lesson. * Ensure that there are copies of all handouts before the training session. * When required, reserve the training room. * Arrange for equipment such as flip charts, an overhead projector, and any other equipment (as needed). * Talk to people in your office who are most familiar with this topic to collect experiences that you can include as examples in the lesson. * This lesson plan belongs to you. Feel free to highlight headings, key phrases, or other information to help the instruction flow smoothly. Feel free to add any notes or information that you need in the margins. |
| Training Day | * Arrive as early as possible to ensure access to the facility and computers. * Become familiar with the location of restrooms and other facilities that the trainees will require. * Test the computer and projector to ensure they are working properly. * Before class begins, open the PowerPoint presentation to the first slide. This will help to ensure the presentation is functioning properly. * Make sure that a whiteboard or flip chart and the associated markers are available. * The instructor completes a roll call attendance sheet or provides a sign-in sheet to the students. The attendance records are forwarded to the Regional Office Training Managers. |

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| Introduction to Hearing Loss and Tinnitus | | |
| INSTRUCTOR INTRODUCTION | | Complete the following:   * Introduce yourself * Orient learners to the facilities * Ensure that all learners have the required handouts |
| time required | | .25 hours |
| Purpose of Lesson  Explain the following: | | This lesson is intended to teach the VSR important factors related to claims for hearing loss and tinnitus. This lesson will contain discussions and exercises that will allow you to gain a better understanding of:   * Hearing Impairment and Tinnitus * Claim Review * Examinations |
| Lesson Objectives  Discuss the following:  Slide 2  Handout 2 | In order to accomplish the purpose of this lesson, the VSR will be required to accomplish the following lesson objectives.  TheVSRwill be able to:   * Identify the types of hearing loss and tinnitus * Determine hearing loss criteria for VA purposes * Identify evidence to review for hearing loss and tinnitus * Identify hearing loss and tinnitus examination and medical opinion criteria | |
| Explain the following: | Each learning objective is covered in the associated topic. At the conclusion of the lesson, the learning objectives will be reviewed. | |
| Motivation | The VA receives many claims for service connection for hearing loss and tinnitus. The timely handling, development and rating of these claims will assist the agency to better meet timeliness goals. | |
| References  Slide 3 & 4  Handout 3 | Explain where these references are located in the workplace.   * [38 CFR §3.385 Disability due to impaired hearing](http://www.ecfr.gov/cgi-bin/text-idx?SID=0ee92cd20c80a308fa4d7d3ea8bf5d04&node=se38.1.3_1385&rgn=div8) * [M21-1MR III.iv.4.B.12](http://www.benefits.va.gov/WARMS/docs/admin21/m21_1/mr/part3/subptiv/ch04/M21-1MRIII_iv_4_SecB.docx) Hearing Impairment * [Medical EPSS](http://epss.vba.va.gov/mepss) | |
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| Topic 1: Hearing Impairment and Tinnitus | | |
| Introduction | | This topic will allow the trainee to identify the types and causes of hearing loss and tinnitus. |
| Time Required | | .5 hours |
| OBJECTIVES/ Teaching Points | | Topic objectives:   * Identify the types of hearing loss and tinnitus * Determine hearing loss criteria for VA purposes   The following topic teaching points support the topic objectives:   * Types of Hearing Loss * Determining Impaired Hearing as a Disability * Types of Tinnitus * Characteristics of Tinnitus * Causes of Tinnitus * Onset of Tinnitus |
| Types of Hearing Loss  Slide 5  Handout 4 | | **Conductive hearing** loss is due to a mechanical problem in the outer or middle ear. Common causes are middle ear infections or fluid in the middle ear, neoplasms, head injury that damages the ossicles, otosclerosis (deposits of bone around the stapes), cholesteatoma, and perforated TM.  **Sensorineural hearing loss** (SNHL) (also called neurosensory hearing loss, and sometimes informally called nerve deafness) is due to a problem in the inner ear or in the auditory (Cranial Nerve VIII) nerve between the inner ear and the brain. It most often occurs when the tiny hair cells in the cochlea are injured, and there may also be nerve fiber damage. The two most common causes of SNHL are **presbycusis (age-related hearing loss) and noise-induced hearing loss (caused by chronic exposure to excessive noise)**. SNHL is usually characterized by hearing loss at the higher frequencies (3,000 to 6,000 Hz). Other common causes of sensorineural hearing loss are Meniere’s disease, vestibular schwannoma (benign neoplasm of the auditory nerve), viruses, and certain ototoxic medications and chemotherapeutic agents.  **Mixed hearing loss** means both conductive and sensorineural forms of hearing loss are present.  **Central hearing loss** is sometimes called central auditory processing disorder (CAPD) is a rare condition that results from disease or injury of the brain. It cannot be detected by routine audiological tests but requires special types of testing. An individual with central hearing loss may be able to perceive sounds but has problems such as difficulty recognizing and interpreting the sounds even when peripheral hearing is normal.  CAPD is diagnosed by special auditory, communication, and memory tests. Veterans with a head injury (traumatic brain injury) may exhibit similar auditory complaints. These veterans probably do not have CAPD but rather may be suffering from auditory manifestations of traumatic brain injury. |
| Determining Impaired Hearing as a Disability  Slide 6  Handout 4 | | Per [38 CFR 3.385](http://www.benefits.va.gov/warms/docs/regs/38CFR/BOOKB/PART3/S3_385.DOC), impaired hearing is considered a disability for VA purposes when   * the auditory threshold in any of the frequencies 500, 1000, 2000, 3000, 4000 Hertz is 40 decibels or greater * the auditory thresholds for at least three of the frequencies 500, 1000, 2000, 3000, or 4000 Hertz are 26 decibels or greater, or * Speech recognition scores using the Maryland CNC Test are less than 94 percent. |
| Hearing Loss in Service  Slide 7  Handout 5 | | The Rater must determine if the disability incurred in service also known as “direct service connection”.    This example shows hearing loss in service when comparing the entrance exam to the exit exam.  Be careful when reviewing audio tests to not consider frequencies at 250, 6000, or 8000 Hertz |
| Tinnitus Defined  Slide 8  Handout 5  Characteristics of Tinnitus  Slide 9  Handout 5 | | Tinnitus is the subjective or objective perception of a ringing or tingling sound in one or both ears without an external stimulus.  Tinnitus may sound like ringing, blowing, roaring, buzzing, hissing, humming, whistling, or sizzling. It can be either constant or intermittent. Both constant and intermittent tinnitus is considered to be recurrent, which is the requirement under diagnostic code 6260 for assigning a 10-percent evaluation. |
| Causes of Tinnitus  Slide 10  Handout 5  Onset of Tinnitus  Slide 10  Handout 6 | | Tinnitus is a symptom that is associated with many conditions, including acute noise exposure and noise-induced hearing loss. Sensorineural hearing loss, such as from presbycusis or acoustic trauma, is the most common cause of tinnitus. However, the etiology of tinnitus often cannot be identified, because there are so many potential causes that it is impossible to select one. In addition to sensorineural hearing loss, other known causes are Meniere’s disease, head injury (including traumatic brain injury), otosclerosis, cerebrovascular disease, neoplasms, numerous types of ototoxic medications, hypertension, kidney disease, dental disorders, and many other medical conditions.  The onset may be gradual or sudden, and individuals are often unable to identify when tinnitus began. Tinnitus can be triggered months or years after an underlying cause (such as hearing loss) occurs. Therefore, delayed-onset tinnitus must be considered. This adds to the difficulty of determining the etiology or precipitating cause. |
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| Topic 2: Claim Review | | |
| Introduction | This topic will allow the trainee to identify the evidence used for claims for hearing loss and tinnitus. | |
| Time Required | .5 hours | |
| OBJECTIVES/ Teaching Points | Topic objectives:   * Identify evidence to review for hearing loss and tinnitus   The following topic teaching points support the topic objectives:   * Reviewing Claims for Hearing Loss and/or Tinnitus * Considering the Duty MOS Noise Exposure Listing | |
| Reviewing Claims for Hearing Loss and/or Tinnitus  *Slide 11*  **Handout 7**  **Considering the Duty MOS Noise Exposure Listing**  **Slide 12**  **Handout 7** | Review each claim for hearing loss and/or tinnitus for   * sufficient evidence of a current audiological disability (including lay evidence), and * evidence documenting * hearing loss and/or tinnitus in service, or * an in-service event, injury, disease, or symptoms of a disease potentially related to an audiological disability.   If there is no documented evidence of an in-service disease, injury, or event with which the claimed condition could be associated, consider the Duty Military Occupational Specialty (MOS) Noise Exposure Listing to help determine the probability of the Veteran’s exposure to hazardous noise in service.  The Duty MOS Noise Exposure Listing, which has been reviewed and endorsed by each branch of service, is available at <http://vbaw.vba.va.gov/bl/21/rating/docs/dutymosnoise.xls>  Based on the Veteran’s records, review each duty MOS, Air Force Specialty Code, rating, or duty assignment documented on the Duty MOS Noise Exposure Listing to determine the probability of exposure to hazardous noise.  If the duty position is shown to have a “Highly Probable” or “Moderate” probability of hazardous noise exposure, concede exposure to hazardous noise for the purposes of establishing an event in service.  ***Note***:   * The Duty MOS Noise Exposure Listing is not an exclusive means of establishing a Veteran’s in-service noise exposure. Evaluate claims for service connection for hearing loss in light of the circumstances of the Veteran’s service and all available evidence, including treatment records and examination results.   ***Reference***: For more information on   * considering the circumstances of the Veteran’s service, see [38 U.S.C. 1154(a) and (b)](http://law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001154----000-.html), | |
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| Topic 3: Examinations | |
| Introduction | This topic will allow the trainee to identify the C&P examination and medical opinion criteria for claims for hearing loss and tinnitus. |
| Time Required | .5 hours |
| OBJECTIVES/ Teaching Points  Requesting Audiometric Examinations and Medical Opinions  Slide 13-19  Handout 8 | Topic objectives:   * Identify hearing loss and tinnitus examination and medical opinion criteria   The following topic teaching points support the topic objectives:   * Requesting Audiometric Examinations and Medical Opinions * When a Medical Opinion is Necessary to Determine Onset or Etiology of Tinnitus   Where the question of service connection is at issue request an audiometric examination and/or opinion when necessary under [38 CFR 3.159(c)(4)](http://www.benefits.va.gov/warms/docs/regs/38CFR/BOOKB/PART3/S3_159.DOC).  ***Notes***:   * Competent evidence of a current diagnosis of symptoms could include records or lay evidence of difficulty hearing or tinnitus. * Establishment of an event, injury or disease in service is fact specific. If there is no documentation of an in-service illness, injury or event involving the ears or hearing, the Duty MOS Noise Exposure listing will be considered. * If noise exposure is conceded based on the duty MOS Noise Exposure Listing include the level of probability conceded, such as “highly probable” or “moderate,” in the information provided to the examiner in the body of the examination request. * If noise exposure is not conceded but an examination and/or opinion are otherwise necessary based on another event, injury, disease provide the probable level of exposure to hazardous noise associated with the Veteran’s documented duty position in the examination request remarks. * If the evidentiary threshold for finding a VA examination necessary under [38 CFR 3.159(c)(4)](http://www.benefits.va.gov/warms/docs/regs/38CFR/BOOKB/PART3/S3_159.DOC) has been met, a duty MOS consistent with a lower probability of hazardous noise exposure than “Highly Probable” or “Moderate” does not preclude a VA examination. * Request a medical opinion regarding the significance of prior audiological findings if the evidence of record is unclear on any point. * In *Noise and Military Service: Implications for Hearing Loss and Tinnitus* (2006), the National Academy of Sciences reported that a delay of many years in the onset of noise-induced hearing loss following an earlier noise exposure is extremely unlikely.   ***References***: For more information on   * when an exam is necessary under the duty to assist, see [M21-1MR, Part I, 1.C.7](imi-internal:M21-1MRI.1.C.7) * use of the duty MOS to determine if there was in-service hazardous noise exposure, see [M21-1MR, Part III, Subpart iv, 4.B.12.c](imi-internal:M21-1MRIII.iv.4.B.12.c), and   medical opinions and the Hearing Loss and Tinnitus Disability Benefits Questionnaire (DBQ), see [M21-1MR, Part III, Subpart iv, 3.A.9.i](imi-internal:M21-1MRIII.iv.3.A.9.i) |
| When a Medical Opinion is Necessary to Determine Onset or Etiology of Tinnitus  Slide 20-21  Handout 9 | A medical opinion is not required to establish direct service connection for claimed tinnitus if   * service treatment records (STRs) document the original complaints and/or diagnosis of tinnitus * there is current medical evidence of a diagnosis of tinnitus or the Veteran competently and credibly reports current tinnitus, and * the Veteran claims continuity of tinnitus since service or there are records or other competent and credible evidence of continuity of tinnitus diagnosis or symptomatology.   ***Exception***: An opinion may be necessary in the fact pattern above if evidence suggests a superseding post-service cause of current tinnitus.  A tinnitus examination may also be necessary if:   * the STRs do not document tinnitus but * there is evidence establishing noise exposure or another in-service event, injury, or disease (for example ear infections, use of ototoxic medication, head injury, barotrauma or other tympanic trauma) that is medically accepted as a potential cause of tinnitus and * there is a competent diagnosis or competent report of current tinnitus.   ***Notes***:   * Under [*Jandreau v. Nicholson*](http://vbaw.vba.va.gov/bl/21/advisory/CAVCDAD.htm#bmj), 492 F.3d. 1372 (Fed. Cir. 2007), a lay person may provide a competent diagnosis of a condition when a lay person is competent to identify a medical condition. Tinnitus is medical condition that a lay person is competent to identify in himself/herself because the condition is defined by what the person experiences or perceives – namely subjective perception of sounds in his/her own ear(s) or head. Therefore, a layperson may establish the diagnosis of tinnitus at any point in time from service to present. However, consider credibility and weight of the evidence in deciding whether to accept lay testimony as proving tinnitus in service or presently. * The Hearing Loss and Tinnitus DBQ tinnitus-only exam includes a number of options for examiner opinions on etiology. The examination may be conducted by an audiologist or non-audiologist clinician. * Only ask the audiologist to offer an opinion about the association to hearing loss if hearing loss is concurrently claimed or already service-connected. |

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| Practical Exercise | |
| Time Required | .25 hour |
| EXERCISE | Allow the students to take turns reading the scenarios out loud and determine the answers. Allow time for questions and answers.  Directions for the exercise: Determine if an audio exam or medical opinion is required for the following scenarios: |
| Handout 10 - 11 |  |

1. A 24 year-old Veteran returned from Iraq in 2015 with some complaints of tinnitus developing a few months after discharge. Her audiogram on separation showed some worsening of hearing at the 3000 and 4000 Hz levels compared to her entrance audiogram, but her hearing impairment did not reach the level required to be considered a disability under § 3.385.

**Answer:** An audiology examination and opinion are required to determine 1) if hearing impairment is present that now meets the criteria to be considered a disability under § 3.385, 2) if so, if it is related to service, and 3) if the complaint of tinnitus is related to any hearing loss found. (See number 3 under section I below re Hensley v. Brown, 5 Vet.App. 155, 159 (1993).)

1. A 66 year-old Veteran was in service from 1961 to 1965, served in Vietnam as a clerk, and did not experience any combat. He has complained of hearing loss since service, during which time he had multiple middle ear infections of both left and right sides. No discharge audiometry examination is available, but his service treatment records show treatment for otitis media on 3 occasions during 1964-65. He has complained of hearing loss for the past 10 years and filed a claim for hearing loss due to ear infections in service. He has medical records showing treatment for otitis media post-service during 1968 and 1970 but none since. A private audiometry test showed a mixed type of hearing loss in the right ear only and mild sensorineural hearing loss in the left ear.

**Answer:** An audiology examination and opinion would be needed to determine if he has hearing loss, the type of hearing loss, and if it is consistent with his ear infections either in service or after service, or both, or is more likely due to another cause.

1. A 42 year-old Marine Corps Veteran served in Iraq in the infantry for 4 years. Ten years after an honorable discharge from service, he files a claim for progressive difficulty in hearing that he believes is related to his service. The entrance and exit physical show no hearing loss. Private medical records show a current diagnosis of hearing loss.

**Answer:** Concede noise exposure as the Duty MOS Noise Exposure Listing shows a high probability of exposure to hazardous noise. A VA audiologic examination is needed to clarify the etiology of the hearing loss.

1. A 33 year old Veteran served in the military 8 years stateside as a clerk. He filed a claim for hearing loss and tinnitus 3 years after discharge. His private medical records (PMRs) show current hearing loss. His entrance and exit physical examination from the military show normal hearing. The Veteran has not provided a nexus statement.

**Answer:** A VA audiologic examination is not needed and should not be scheduled. There is no event in service and the Duty MOS does not show Clerk as having a high or moderate degree of probability to concede hazardous noice exposure.

1. A 69 year-old Veteran served 18 months in Vietnam in 1964 in non-combat duty. He filed a claim in 2009 for sudden onset in 2008 of severe right-sided sensorineural hearing loss that he believes is related to his service-connected diabetes mellitus. One private physician stated that the hearing loss is due to diabetes while another attributed the hearing loss to labyrinthitis.

**Answer:** A VA audiologic and ENT examination are needed to clarify the etiology of the hearing loss and any possible relationship to in-service injury, event, or illness, or to his service-connected diabetes.

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| Lesson Review, Assessment, and Wrap-up | |
| Introduction  Discuss the following: | The Hearing Loss and Tinnitus lesson is complete.  Review each lesson objective and ask the trainees for any questions or comments. |
| Time Required | .25 hours |
| Lesson Objectives | You have completed the Hearing Loss and Tinnitus lesson.  The trainee should be able to:   * Identify the types of hearing loss and tinnitus * Determine hearing loss criteria for VA purposes * Identify evidence to review for hearing loss and tinnitus * Identify hearing loss and tinnitus examination and medical opinion criteria |
| Assessment | Remind the trainees to complete the on-line assessment in TMS to receive credit for completion of the course.  The assessment will allow the participants to demonstrate their understanding of the information presented in this lesson. |