

AMA Hearing Loss/ Tinnitus Guidelines

By Dennis A. Colucci, AuD, MA

The Guides to the Evaluation of Permanent Impairment, now in its sixth edition, presents the most comprehensive system of assessing impairment, utilizing many of the application designs established by the World Health Organization (WHO). Upgrades in the current edition center on clinical expertise and methodologies that improve consistency, precision, standardization, and repeatability.

This system considers diagnosis, functional symptomatology, physical findings, and epidemiology and clinical studies as the bases for assessment, allowing for standardization across modalities and organ systems, and for rating decisions to be more uniform across patients.

HEARING LOSS DOESN'T STAND ALONE

People with hearing loss are at a disadvantage when it comes to negotiating activities of daily living, especially when patients are older and have other sensory or motor comorbidities. Each physical or mental challenge adds a layer of impairment to the whole person.

For example, adding a cognitive disability or a psychological condition such as post-traumatic stress disorder, depression, anxiety, or suicidal ideation to hearing loss would increase the whole person impairment (WPI). A patient with hearing loss and tinnitus has ratings for each, with the possibility of additional ratings from the mental and behavioral domains for debilitating tinnitus, hyperacusis, or misophonia.

To the clinician, hearing loss does not stand alone in the overall health of a person and should be weighed against all factors that affect engagement or isolation because auditory training and neuroplasticity maintenance are daily activities. Understanding the workings of the WPI system is useful for rating how the impairment affects quality of life and, specifically, activities of daily living. This approach is helpful from a number of standpoints, both clinical and legal.

The percentage of WPI varies across systems. For example, the functional loss of an eye converts to 16 percent WPI, and the loss of one ear's function is 7 percent WPI. Bilateral profound deafness is rated at 35 percent WPI, while 95 percent vision loss is 100 percent WPI. In the last case, vision loss is considered more of an impairment because it reduces daily functionality, visual mobility, and reading, and requires significant accommodations.



Dr. Colucci is a clinical and forensic audiologist in private practice in Laguna Hills, CA.

Deafness does not prevent mobility or the ability to take care of oneself. For binaural hearing loss WPI, the calculations, originally developed by the American Academy of Otolaryngology–Head and Neck Surgery (AAO–HNS) for a moderate hearing loss, work like this:

First, calculate the monaural impairment:

$$\text{Pure-tone average (PTA)} = [(0.5 \text{ kHz} + 1 \text{ kHz} + 2 \text{ kHz} + 3 \text{ kHz})/4] = \text{dB HL}$$

Then, deduct the first 25 dB of loss, and multiply the remainder by 1.5 percent:

$$(\text{dB HL} - 25 \text{ dB}) \times 1.5\% = \text{impairment}$$

For example, if right-ear values are 45, 50, 50, and 55, respectively, right-ear impairment is:

$$(45 + 50 + 50 + 55)/4 = 50$$

$$50 - 25 = 25$$

$$25 \times 1.5\% = 37.5\%$$

If left-ear values are 40 for all frequencies, left-ear impairment is:

$$(40 + 40 + 40 + 40)/4 = 40$$

$$40 - 25 = 15$$

$$15 \times 1.5\% = 22.5\%$$

Second, calculate binaural impairment:

$$[5(\text{Better Ear}) + \text{Worse Ear}]/6$$

$$[(5 \times 22.5) + 37.5]/6 = 25\%$$

Finally, see Table 11-3 of the Guides to the Evaluation of Permanent Impairment and select the rating for 25 percent binaural impairment or 9 percent WPI.

PROVIDE APPROPRIATE PRESCRIPTIONS

The guide is not designed to establish work eligibility, restrict someone from performing a desired skill, or deny access, but rather as an index to set forth a diagnosis and percentage of physical or functional loss, establish permanent loss, and provide a hierarchy of classification for long-term conditions.

The taxonomy of classifying impairments such as vertigo is broken into five severity classes based on history, physical examination, and diagnostic or objective findings, with Class 0 signifying minimal impairment and Class 4 the most severe.

The fact that hearing loss was recently qualified as a risk factor for accelerating brain aging by reducing brain volume and cognitive abilities increases the importance of hearing loss to the medical professions. Since all advanced hearing technologies essentially have the same outcomes, providing appropriate prescriptive and verification/validation measures is mandatory for every audiologist. As hearing changes, so do communication ability, cognitive function, and psychological factors of depression and disorientation, affecting quality of life and the whole person, not just hearing.