

HEARING PROTECTORS, HEARING LOSS, AND INTELLIGIBILITY

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Readers of my column should by now be used to my predilection for rigorously defining terms that are frequently used in the acoustics side of the field. Let's keep with that practice and define the terms in the title "Hearing Protectors, Hearing Loss, and Intelligibility," so that there will be no misunderstandings.



As per the CSA Standard Z94.2-14, a "**hearing protection device** (HPD) is a personal device, also referred to as a hearing protector, worn as a barrier to reduce the sound level entering the cochlea (inner ear) in order to diminish the harmful auditory and/or annoying subjective effects of sound." The reduction of the sound level ("attenuation") is something that is measured and is in the most recent ANSI standard (S12.6-2008) on this topic. This reduction is also examined in the Canadian standard Z94.2-14 where the methods of measurements as well as the application of the results of the measurement are specified.

As per [Wikipedia](#), "...**hearing loss** exists when there is diminished sensitivity to the sounds normally heard. The terms hearing impaired or hard of hearing are usually reserved for people who have relative insensitivity to sound in the speech frequencies."

Finally, and again as per