

Does Presbycusis Cease at Age 60?

OSHA permits age correction to offset the potential hearing loss attributed to the normal process of ageing (Presbycusis). Does Presbycusis cease at age 60? To look at the age correction values in Tables F-1 (Male) and F-2 (Female) in the OSHA noise standard, one might receive that impression.

The estimated age correction values currently permitted in annual test comparisons (except in Washington and Oregon in 10 dB shift analysis) were adopted in the Hearing Conservation Amendment of 1983. These values resulted from a cross sectional (a one time "snapshot") analysis of test data from persons ranging between 20-60 years of age. NIOSH, in their paper entitled *Criteria for a Recommended Standard Occupational Noise Exposure*, reminds us that longitudinal hearing loss data (data collected over an extended time period of time) was simply not available in the years leading up to the adoption of the currently implemented age correction estimates and thus these estimates were derived by looking at hearing data of 20 year olds compared to that of 60 year olds to provide loss rate estimates as a function of ageing. NIOSH does not adopt use of age correction in occupational Hearing Loss Prevention Programs.

It can be argued that the current age correction values are unreliable but nonetheless their use continues mostly because no one has cared to update the research combined with the fact that such a major amendment to the noise standard would entail a great deal of legal and monetary resources. NIOSH points out that the reliability of the age correction data is questionable since social and health related circumstances differ greatly between ages (e.g. a 20 versus a 60 year old). Additionally, the world today is inarguably louder.

...So back to the original question: Does Presbycusis cease at age 60? No, it does not. The magic "60 and older" cut-off was arbitrarily adopted and it was common (at that time) for many workers to retire at age 60

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