

**Epidemiology and aetiology of age related hearing loss (ARHL)**

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The populations of Europe have become progressively older in the last 160 years without evidence of leveling off. While age related functional impairment because of vision has declined in the last decades, no such trend has been identified clearly for impairment because of ARHL. Hearing loss remains the most widespread sensory impairment in aging people. The cognitive and psychosocial consequences of HL are well described and well know, but population based epidemiological knowledge or trends of the amount of HL and its health relevant consequences are not well described in Europe. Several difficulties such as definition of HL, measurement of HL, or measurement of impairment induced by HL may contribute to the lack of standardized, population based data. An additional reason for the lack of standardized epidemiological data may also be the multiple parts of ARHL and the various factors contributing to it. The function of the peripheral hearing organ is declining with age because of cumulative damage to its sensory an neural elements due to genetic background, noise, middle ear inflammation, medication, exposure to toxins including nicotine, and cardiovascular factors. Decline of central auditory functions is a prominent but less well recognized and more difficult to assess component of ARHL. It is partly due to similar factors causing peripheral damages, notably genetic background and cardiovascular factors, but different factors such as deprivation contribute as well.

