The final paper was not available at deadline.

Hearing loss is a public health problem determined by noise and life-course events

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ABSTRACT

In Europe, there are 26 % of adults with a bilateral hearing problem that impairs their ability to hear in noisy situations substantially and a further 2 % who have substantial unilateral hearing problems, impacting substantially on their ability to locate a sound (e.g. car, bus, voice). The prevalence is highly related to age. There is no remission. There is a similar prevalence worldwide on an age adjusted basis. About a quarter of this may be attributable to noise. A small but substantial number of people acquire hearing loss as a complication of cancer treatment and there is no evidence that their hearing problems are diagnosed earlier. We can reduce the impact that noise and toxins have on the cochlea and on the auditory cortex, but age is still by far the biggest problem we have to tackle! In terms of noise, there are four main sources - background, social, environmental and occupational noise. How do we tackle all of these? Which are the most important messages for individuals, communities and governments? In addition to noise, there is accumulating evidence that early social and biological factors may influence hearing in middle age. In addition there are factors such as alcohol, tobacco and diabetes that are also associated with high frequency hearing loss at this age. This offers the prospect that we should combine public health effort with efforts to tackle environmental and personal factors affecting health and hearing health; this may be more effective than tackling the hearing conservation issues alone.