



Economic impacts of noise and hearing loss in America

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ABSTRACT

Evaluations of noise exposures and the economic impacts of noise-related health effects have not been conducted in the United States for several decades. As a result, the prevalence of potentially harmful noise exposures to the American public, as well as the economic burden associated with auditory and non-auditory effects of noise, have not been sufficiently characterized. We created updated estimates of US noise exposures based on data from the 1980s, and used these estimated exposures to model the cost savings that could be achieved through the prevention of hypertension and myocardial infarction as a result of a hypothetical 5 dB reduction in noise exposures in America. We used similar exposure estimates to model the potential US wage losses that could be avoided through the prevention of noise-induced hearing loss. While our estimates of the economic impacts of auditory and non-auditory impacts of noise exposure contain substantial uncertainty, they nevertheless suggest that annual costs in the US could exceed \$125 billion when avoidable healthcare costs from cardiovascular disease and avoidable wage and employment losses from noise-induced hearing loss are considered.