

Acoustics

The World Health Organization ranks noise pollution as the second most common urban environmental stressor in Europe [1]. A prolonged exposure to noise can in fact lead to hypertension, annoyance, sleep disturbance, cognitive decline, and cardiovascular disorders. Urban traffic noise in England is estimated to have an annual social cost of £7-£10 billion [2]. In this context, a recent research publication by the European Environment Agency estimated that 113 million individuals are thought to be annually impacted by long-term exposure to traffic noise levels of at least 55 dB(A), day and night [3].

While it is imperative that noise reduction measures are implemented to preserve public health and the environment, the pursuit of a purely anti-noise quantitative approach may have the unintended consequence of reducing or eliminating human and environmental sounds that are beneficial to our health and overall well-being [4]. As an example, the noise strategy of the City of London Corporation [5] recognises that *'the noise resulting from the vibrancy of the City for many is iconic, invigorating and an essential element or 'buzz' of the City 'soundscape'*. It also recognises the need to provide respite from urban noise and encourages the identification and protection of relatively tranquil areas in the City as well as the preservation of 'iconic sounds' such as church bells.

References

1. World Health Organization (2018). [Environmental noise guidelines for the European region](#).
2. DEFRA (2014). [Noise pollution: economic analysis](#).
3. European Environment Agency (2020). [Environmental noise in Europe 2020](#).
4. Radicchi *et al* (2020). [Sound and the healthy city](#). *Cities & Health*, 5:1-2, 1-13. DOI: 10.1080/23748834.2020.1821980
5. City of London Corporation (2016). [City of London noise strategy 2016 to 2026](#).

(DOI finder <https://dx.doi.org>)
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