



Sleeping near airports is bad for your health

Recent studies indicate that exposure to noise is damaging to your health. New research from the EU-funded HYENA (Hypertension and Exposure to Noise near Airports) Study¹ shows that living near an airport increases your risk of hypertension.

Traffic noise from roads, airports and railways is a major environmental problem and is increasingly recognised as a serious threat to public health by the World Health Organisation². Recent research suggests a link between traffic noise and hypertension, a medical condition in which blood pressure is raised.

A 4-year study carried out as part of the HYENA project, explored the health effects associated with exposure to aircraft noise. The project included studies near major airports in Germany (Berlin Tegel), Greece (Athens), Italy (Milano Malpensa), the Netherlands (Amsterdam Schiphol), Sweden (Stockholm Arlanda) and the UK (London Heathrow). In total, 5,000 participants, between 45-70 years of age, who had lived near any of the six European airports for at least five years, were included in the study.

Participants were exposed to substantial night-time noise in all the participating countries, particularly in the late evening and early morning. Night-time noise caused a significant increase in blood pressure amongst participants. The results suggest that an increase in night-time aeroplane noise of only 10 decibels increases the risk of blood pressure by 14 per cent in both men and women. Exposure to 24-hour road traffic noise also increases blood pressure, particularly in men.

The International Air Transport Association (IATA) has predicted an annual growth in the number of passengers of 4.3 per cent until 2015. As air travel is on the increase and airports are expanding to meet this demand, traffic noise around airports is likely to increase. This research suggests that the rise in noise will also contribute to the growing burden of cardiovascular disease on public health resources.

Preventative measures should be considered to reduce noise. The Green Paper on Future Noise Policy³ aimed to develop noise reduction policies to prevent human exposure to excessive noise levels, which endanger health and quality of life. Following on from this, the Directive on Environmental Noise⁴ aims to provide a common basis for tackling the noise problem across the EU.

1. The HYENA study was funded by a grant from the European Commission (Directorate General Research) Quality of Life and Management of Living Resources, Key Action 4 Environment and Health (grant QLRT-2001-02501). www.hyena.eu.com
2. The WHO noise page <http://www.euro.who.int/Noise>
3. <http://ec.europa.eu/environment/noise/greenpap.htm>
4. Launched June, 2002. Strategies planned until January, 2014. <http://ec.europa.eu/environment/noise/directive.htm>

Source: Jarup, L., Babisch, W., Houthuijs, D. *et al.* (2008). Hypertension and Exposure to Noise Near Airports: the HYENA Study. *Environmental Health Perspectives*. 116: 329-333.

Contact: ljjarup@imperial.ac.uk

Themes: Environment and Health, Noise

Opinions expressed in this News Alert do not necessarily reflect those of the European Commission

To cite this article/service: "[Science for Environment Policy](#)"; European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.