

EU vehicle noise emission standards: health evidence and concerns



Health and
Environment
Alliance

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EU Member States and the European Parliament are deliberating new EU standards for vehicle noise, the first update in 20 years. This overhaul is a not-to-be missed opportunity to improve the health and quality of life of Europe's citizens, who are very concerned about the health impacts of noise and to set the path for more sustainable and healthy transport.

This briefing by the Health and Environment Alliance (HEAL) aims to give an overview of the latest evidence on health effects of environmental noise, and what health groups are saying.

WHAT DOES THE SCIENCE SAY?

The body of evidence on health effects of environmental noise has grown tremendously in the last years. There is enough evidence to act, and the science underlines the urgency to act for health prevention.

WORLD HEALTH ORGANIZATION: THE BURDEN OF DISEASE FROM ENVIRONMENTAL NOISE

This [comprehensive assessment](#) of the science on health effects of noise shows that in the EU and Norway, [TRAFFIC NOISE IS THE SECOND BIGGEST ENVIRONMENTAL THREAT TO HEALTH AFTER AIR POLLUTION](#).

Each year Europeans lose at least one million healthy life-years due to disability or disease caused by traffic noise (This is a conservative estimate). The analysis is based on data that measures exposure to traffic noise and its impact on health related to cardiovascular disease, cognitive impairment in children, sleep disturbance, tinnitus, and annoyance. According to the study, 1.8% of heart attacks in high income European countries are attributed to traffic noise levels higher than 60dB.

DENMARK: ROAD NOISE AND HEART ATTACKS

Researchers from Denmark found that for [EVERY 10 dB HIGHER EXPOSURE TO TRAFFIC NOISE IN RESIDENTIAL NEIGHBOURHOODS, THE RISK OF A HEART ATTACK INCREASES BY 12%](#). The [study](#) brings together results from more than 50,000 participants living in Danish urban areas (Copenhagen and Aarhus). The authors adjusted their findings with known risk factors for myocardial infarction such as blood pressure, high cholesterol levels and diabetes or air pollution, and are so able to establish a clear dose-response relationship between residential exposure to road traffic noise and increased heart attack risk. They also found indications that road traffic noise had a high effect on myocardial infarction in people who never smoked.

DENMARK: ROAD NOISE AND STROKES

This [study](#) is one of the first to establish a link between exposure to noise and stroke, showing that 600 strokes each year in Denmark are due to road traffic noise.

TNO: FATAL HEART ATTACKS

An assessment by the Dutch consultancy TNO linked noise pollution to 50,000 fatal heart attacks each year, and to 200,000 cases of all types of cardiovascular disease. It is estimated that some 210 million EU citizens, over 44% of the population, are regularly exposed to road traffic noise at levels the WHO considers to be a serious risk to health. In a follow up analysis in 2012, TNO ESTIMATED THAT SOME 79 BILLION EUR OF ACCUMULATED SAVINGS TO 2030 WOULD BE GAINED FROM HEALTH-RELATED EXPENDITURES, with the implementation of a more legislation on vehicle noise.

LISTEN TO YOUR DOCTOR – WHAT HEALTH GROUPS SAY:

HEALTH EXPERTS FOR STRICTER EMISSION STANDARDS:

Twenty leading experts in the field of noise and health, and vehicle technologies, including one of the leading experts on cardiovascular disease and the coordinator for the EU funded ENNAH project, wrote to the EP rapporteur and coordinators in March 2012. They warn that the noise burden on Europeans has continued to increase, and express their concern that there has been very little progress in traffic noise reduction. The experts support ambitious regulation to tighten the EU standards and confirm that the monetary benefits of quieter traffic by far outweigh the

costs of quieter vehicles to society.

BRITISH MEDICAL ASSOCIATION

The British Medical Association is an association who has represented doctors and has promoted good healthcare for all for over 175 years. BMA's report "Healthy Transport, healthy lives" looks at the costs to the UK of increased vehicle numbers and traffic volume and the benefits of promoting active travel (walking and cycling) and other sustainable transport measures. The doctors confirm that transport-related noise pollution (predominantly from roads, railways and airports) can adversely affect the cardiovascular system, mental health status, and the school performance in children. THE REPORT STATES THAT TRANSPORT IS THE LEADING CAUSE OF NOISE POLLUTION, AND THAT MEASURES TO TACKLE NOISE AT SOURCE HAVE THE GREATEST POTENTIAL TO REDUCE EXPOSURE.

ACT NOW FOR BETTER HEALTH

As the amount of traffic on our streets is not expected to decrease, it is ever more important to achieve real reductions in vehicle noise. Reductions of 3 decibels are technically feasible and will mean a significant improvement of the health and quality of life of citizens.

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The Health and Environment Alliance (HEAL) is a leading European not-for-profit organization addressing how the environment affects health in the European Union. With the support of its over 70 member organizations, which represent health professionals, not-for-profit health insurers, patients, citizens, women, youth, and environmental experts, HEAL brings independent expertise and evidence from the health community to different decision-making processes. Members include international and Europe-wide organisations as well as national and local groups.

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