

From: [REDACTED]
To: [Manston Airport](#)
Subject: Additional Evidence: Noise
Date: 30 June 2019 15:55:39
Attachments: [The harms to health caused by aviation noise require urgent action BMJ.rtf](#)

From: Chris Lowe. Interested party: 20014275

Dear Sirs,

In addition to my previous evidence, I have just come across this recent paper which adds to the crescendo of evidence that each new research publication shows that the impacts of noise are worse than previously shown.

In this case, the British Medical Journal (BMJ) has a short but succinct item on noise.

As well as noting that the adverse effects of noise were recognised 104 years ago, it refers to Britain being a co-signatory to the WHO *Charter on Transport, Environment and Health in 1999*, which recommended that the health of the community should be put first when considering transport,

The Charter also recommended that the “polluter pays” principle; the commonly accepted practice whereby those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment.

The government signed up to these, so this Examination must recommend that any decision on Manston must comply with these requirements.

The article notes that double glazing is simply not good enough for noise insulation, and of course it is inadequate for heat insulation too, if comfort in heatwaves and carbon zero is to be achieved.

It also notes that the evidence of substantial effects in disease has not yet been sufficiently appreciated, and concludes that the WHO 2018 Guidelines provide clear scientific evidence to reduce noise to the levels recommended.

Therefore the Application for Manston Airport cannot be allowed because it would greatly increase noise from both aircraft and road traffic, and so I can consider that there can be no alternative but to recommend refusal of this damaging scheme.

I hope this is helpful,

best wishes,

Chris

Chris Lowe

The harms to health caused by aviation noise require urgent action

<https://blogs.bmj.com/bmj/2019/06/18/the-harms-to-health-caused-by-aviation-noise-require-urgent-action/>

June 18, 2019

In 1905, the Nobel Prize-winning bacteriologist Robert Koch wrote “*The day will come when man will have to fight noise as inexorably as cholera and the plague.*”

Koch was before his time and could not have anticipated the rapid growth of aviation worldwide and the impact that aviation noise would have on health. In October 2018, the World Health Organisation (WHO) published its long awaited new guidelines for environmental noise. [1] The guidelines make source-specific recommendations for noise from aviation, as well as road, rail, wind turbines, and leisure. They include tough new lower thresholds set for aviation noise, reflecting the growing body of evidence about the harmful effects of noise on health.

This issue is not new. In 1999, in an attempt to achieve a balance between health hazards for communities near airports with current and proposed developments, the WHO Charter on Transport and Environmental Health recommended that the health of the community should be put first when considering transport since adverse environmental effects fall disproportionately on the vulnerable, particularly children, and the infirm and older people [2]. It also recommended the “polluter pays” principle; the commonly accepted practice whereby those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment. Britain was a co-signatory to this WHO Charter. Unfortunately, this charter seems to have had little effect, since in practice little notice has been taken of it when planning airport expansion and introducing airspace changes. Health impact assessments, if they were carried out, lacked transparency as they were often undertaken by airport operators. Seemingly there has been a reluctance to protect the health of the population in the face of commercial pressures pursuing economic benefits. The 2018 WHO guidelines, although designated for Europe, have global applications with input from Australia, America and Asia. The recommendations are much tougher than the WHO 1999 guidelines, so one would hope that they may have more effect.

Although well recognised as an environmental harm, there is now considerable recent literature on the adverse health effects of noise on children’s education and cardiovascular disease. The RANCH study conducted among primary school children near major airports in Europe, matched for socio-economic status, reported that chronic exposure to aircraft noise has a negative effect on children’s reading and learning outcomes [3]. A study from Germany has not only confirmed these findings, but also showed that children with language or retention disorders, or who are learning in a second language, experienced more impairment [4]. Studies near Heathrow schools indicate that even double glazing is insufficient for noise insulation [5].

There is insufficient appreciation of the fact that aircraft noise has substantial effects on cardiovascular disease including hypertension, ischemic heart disease, heart failure and stroke. [6-11] This may be because many studies have only been recently published.

The WHO 2018 report concludes that government policy and noise targets are inadequate and out of date, and it strongly recommends that new targets are established and incorporated into national policies. The WHO report also emphasises that communities potentially affected by any change in aviation noise exposure should be informed and involved in plans.

The report recommends threshold aircraft noise limits of 45dB Lden during the day and 40dB Lnight at night compared with the previous levels of 55dB and 45dB respectively. These recommendations present a significant challenge for the aviation industry. Forecasts in 2017 showed that worldwide passenger numbers could double to 8.2 billion annually by 2037 [12]. The aviation industry states that “new generation aircraft will be 50% quieter” but this needs to be carefully scrutinised since this falls well short of halving the noise intensity or loudness of an aircraft’s noise emissions [13]. While current aircraft have reduced their noise emissions compared with earlier generations, this improvement is now becoming much less marked in terms of the actual reduction of noise intensity. In the United Kingdom alone it has been estimated that over half the population is exposed to more than the WHO’s previous recommended daytime noise levels and just under three quarters reside in areas where previous recommended night time noise levels are exceeded [14]. Unless urgent action is taken using the new WHO recommendations for lower thresholds, the health of communities residing near airports will continue to show marked deterioration.

Government departments such as the Department for Transport and the Department for Environment, Food and Rural Affairs have major roles to play and healthcare advisers can reduce the risks of cardiovascular disease among their patients. However, environmental factors such as noise and atmospheric pollution need input from the Department of Health. In our view, so far, its voice has been somewhat muted; a stronger lead is required.

Mitigation strategies ought to be a joint approach from both central and local governments. But decisions relating to the planning of airport development are now mostly in the hands of local authorities. Many are unlikely to have the necessary resources, expertise, and experience to handle this decision-making process and are experiencing financial constraints.

The findings of the 2018 WHO guidelines contain scientific data that is loud and clear. This should be the catalyst for revised policies and actions to ensure there is an equitable balance between economic benefit and the health and wellbeing of communities. The cost and long-term consequences of inaction will be considerable.

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Declaration of interests: *JB and MP are advising Stop Stansted Expansion on health and noise respectively. No financial interests involved.*

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