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Aircraft noise 'link' to stroke and heart disease deaths

By Jane Dreaper Health correspondent, BBC News



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The noise of low-flying aircraft can be

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The risks of stroke, heart and circulatory disease are higher in areas with a lot of aircraft noise, researchers say.

Their study of 3.6 million residents near Heathrow Airport suggested the risks were 10-20% higher in areas with the highest levels of aircraft noise.

The team's findings are [published in the British Medical Journal](#).

They agreed with other experts that noise was not necessarily to blame and more work was needed.

Their work suggests a higher risk for both hospital admissions and deaths from stroke, heart and circulatory disease for the 2% of the study - about 70,000 people - who lived where the aircraft noise was loudest.

The lead author, Dr Anna Hansell, from Imperial College London, said: "The exact role that noise exposure may play in ill health is not well established.

"However, it is plausible that it might be contributing - for example, by raising blood pressure or by disturbing people's sleep."

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Professor Stephen Stansfeld Queen Mary University of London

"There's a 'startle reaction' to loud noise - if you're suddenly exposed to it, the heart rate and blood pressure increase.

"And aircraft noise can be annoying for some people, which can also affect their blood pressure, leading to illness.

"The relative importance of daytime and night-time noise from aircraft also needs to be investigated further."

The study used data about noise levels in 2001 from the Civil Aviation Authority, covering 12 London boroughs and nine districts outside of London where aircraft noise exceeds 50 decibels - about the volume of a normal conversation in a quiet room.

The authors say fewer people are now affected by the highest levels of noise (above 63 decibels) - despite more planes being in the skies - because of changes in aircraft design and flight plans.

The researchers - from Imperial and also King's College London - adjusted their work in an effort to eliminate other factors that might have a relationship with stroke and heart disease, such as deprivation, South Asian ethnicity and smoking-related illness.

They stressed that the higher risk of illness related to aircraft noise remained much less significant than the risks from lifestyle factors - including smoking, a lack of exercise or poor diet.

[In an accompanying editorial](#), Prof Stephen Stansfeld, from Queen Mary University of London, said: "These results imply that the siting of airports and consequent exposure to aircraft noise may have direct effects on the health of the surrounding population.

"Planners need to take this into account when expanding airports in heavily populated areas or planning new airports."

Noise 'has fallen'

The study covered 12 London boroughs in the centre and west of the capital - and nine council districts beyond London, including Windsor and Maidenhead, Slough and Wokingham.

Heathrow Airport's director of sustainability, Matt Gorman, said: "We are already taking significant steps to tackle the issue of noise.

"We are charging airlines more for noisier aircraft, offering insulation and double glazing to local residents and are working with noise campaigners to give people predictable periods of respite from noise.

"Together these measures have meant that the number of people affected by noise has fallen by 90% since the 1970s, despite the number of flights almost doubling."

A government spokesman said: "The number of people affected by high levels of noise around Heathrow has been falling for years due to improvements in aviation technology, better planning of flight paths and other factors. We would expect to see this trend continue."

[A separate study](#), also published on Wednesday in the BMJ, demonstrates a higher rate of admission to hospital with cardiovascular problems for people living near 89 airports in the US.

Prof Kevin McConway, from the Open University, said: "Both of these studies are thorough and well-conducted. But, even taken together, they don't prove that aircraft noise actually causes heart disease and strokes.

"A major difficulty in interpreting what these studies tell us is that they are based on data for geographical areas, not for individual people."

Over the coming months, Public Health England will recruit experts to further examine the public health issues around exposure to noise.