EDITOR'S CHOICE

It's the ecology, stupid

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Climate change, say Anthony Costello and colleagues, is a bad dream that won't go away, a "superwicked" problem (doi:10.1136/bmj.f6060). "Wicked" is social planning speak for a complex problem with many causes and no straightforward solutions. We cannot assume that a future geek or Nobel prize winner will fix climate change, warn the authors: we all have to tackle this together. Health workers in particular have concerns, knowledge, and skills that can be put to good use to mitigate climate change, protect the most vulnerable populations, and act as advocates. We should be shouting from the rooftops that climate change is a health problem.

Meanwhile, millions of rooftops are being skimmed by planes. You might imagine that living right under a flight path could affect mental health, but could it have any impact on physical health? It's beginning to look that way, explains psychiatrist Stephen Stansfeld, in discussing two new studies that are ecological in both senses of the word (doi:10.1136/bmj.f5752). Anna Hansell and colleagues found significant excess risks of stroke, coronary heart disease, and cardiovascular disease, among 3.6 million people living near London Heathrow airport, most markedly among the 2% of the population exposed to the highest levels of aircraft noise (doi:10.1136/bmj.f5432). The authors rightly avoid any causal inferences, not least because they had no data on individual residents' risk factors. But their analyses were adjusted using area level data on age, sex, social deprivation, ethnic composition, lung cancer mortality (as a conservative proxy for smoking) and—for the areas within London—particulate air pollution and road noise.

Andrew W Correia and colleagues used different methods and datasets, yet came to very similar conclusions about the risks

of cardiovascular disease among more than 6 million older people exposed to aircraft noise near 89 US airports (doi:10.1136/bmj.f5561). Both papers come with video abstracts that really bring the studies to life. Head over to our multimedia channel for these and a growing collection of short films made by the authors of *BMJ* research papers (<http://bit.ly/1cGZQ8x>).

Last month's report from the Intergovernmental Panel on Climate Change (IPCC) pushed the science on climate change one step further from "the region of speculation and loose statement into the domain of precise and definite knowledge." That quote comes not from the IPCC's report, however: it's how Joseph Lister concluded his inaugural lecture as professor of surgery at Kings' College London on 1 October 1877. The only full record of Lister's talk was captured verbatim in shorthand by a correspondent from the *British Medical Journal* (*Br Med J* 1877;2:465). Now medical student Ben Chisnall has written up the lecture's re-enactment that took place at King's College last week (doi:10.1136/bmj.f6075). Rather than talking directly about aseptic surgical technique, Lister got his audience's attention by demonstrating his proof that putrefaction and fermentation are caused by microorganisms. Then, as now, the science of interactions between organisms and their environments (which is, of course, the definition of ecology) mattered to medics, even the sceptics.

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