

Climate change won't reduce winter deaths

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In a study that contradicts the received wisdom on health impacts of climate change, scientists say that we shouldn't expect substantial reduction in winter deaths as a result of global warming. This new research is published today in IOP Publishing's *Environmental Research Letters* journal.

The research team was led by Professor Patrick Kinney of Columbia University in the USA.

Professor Kinney said "As Dr Margaret Chan told delegates at the recent World Health Assembly, we need to know the potential impacts of climate change on health so that we can plan [public health interventions](#), accordingly.

"For years I've been hearing people say that [global warming](#) will reduce winter deaths but I wanted to check this claim out for myself." Professor Kinney and his colleagues used statistical methods to pick apart the possible factors contributing to deaths of older people during the winter; they found that cities with warmer winters have similar amounts of winter deaths as do cities with colder winters.

"Most older people who die over the winter don't die from cold," Professor Kinney said, "they die from complications related to flu and other respiratory diseases." Unfortunately the holiday season probably plays a part; when [older people](#) mix with the younger generations of their families, they come into contact with all the bugs that the kids have brought home from school."

We often hear about "flu season" but it actually isn't known why flu emerges in seasonal waves. There is some evidence that dry air in winter plays a role, but having had personal experience of lung irritation resulting from a room humidifier, Professor Kinney has second thoughts about that particular solution. "Vaccination and good hygiene are probably the most affective interventions available, right now," he said.

The research doesn't say that cold can't be deadly - of course it can - but deaths due to slips and falls, heart attacks while shovelling snow, hypothermia, etc. are anomalies amongst the relatively high number of deaths from communicable diseases.

The people in the study all lived in the USA or France and the majority had access to a warm indoor environment. "Because of this" says Professor Kinney, "most people aren't directly exposed to cold air for long periods."

Of course, there are many factors that may link climate change to health and wellbeing. We see mosquito-borne diseases emerging in new territories because warmer winter temperatures enable the insects to overwinter in more northerly regions; warmer temperatures can also enable an insect-borne virus to replicate inside the insect vector to be transmitted and cause disease in a human or animal; cases of food poisoning tend to increase with warmer summer temperatures; and airborne pollution and pollen worsen as temperatures rise, causing deaths from respiratory failure.

Sadly, this research tells us that an increase in summer deaths due to [climate change](#) is unlikely to be counteracted by a reduction in winter deaths.

More information: 'Winter Season Mortality: Will Climate Warming Bring Benefits?' Kinney et al 2015 *Environ. Res. Lett.* 10 064016. [DOI](#):

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