

Climate change unlikely to reduce UK's excess winter death rate, study reports

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New research published today has found that climate change is unlikely to reduce the UK's excess winter death rate as previously thought.

The study is published in the journal *Nature Climate Change* and debunks the widely held view that warmer winters will cut the number of deaths normally seen at the coldest time of year.

Analysing data from the past 60 years, researchers at the University of Exeter and University College London (UCL) looked at how the [winter](#) death rate has changed over time, and what factors influenced it.

They found that from 1951 to 1971, the number of cold winter days was strongly linked to death rates, while from 1971 to 1991, both the number of cold days and [flu activity](#) were responsible for increased death rates. However, their analysis showed that from 1991 to 2011, flu activity alone was the main cause in year to year variation in winter mortality.

Lead researcher Dr Philip Staddon said:

"We've shown that the number of cold days in a winter no longer explains its number of excess deaths. Instead, the main cause of year to year variation in winter mortality in recent decades has been flu."

The team suggest that this reduced link between the number of cold days and deaths in a winter can be explained by improvements in housing, health care, income and a greater awareness of the risks of the cold.

As climate change progresses, the UK is likely to experience increasing weather extremes, including a greater number of less predictable periods of extreme cold. The research highlights that, despite a generally warmer winter, a more volatile climate could actually lead to increased numbers of winter deaths associated with climate change, rather than fewer.

Dr Staddon believes the findings have important implications for policy:

"Both policy makers and health professionals have, for some time, assumed that a potential benefit from climate change will be a reduction in deaths seen over winter. We've shown that this is unlikely to be the case. Efforts to combat winter mortality due to cold spells should not be lessened, and those against flu and flu-like illnesses should also be maintained."

Co-author, Prof Hugh Montgomery of UCL said:

"Climate change appears unlikely to lower winter [death rates](#). Indeed, it may substantially increase them by driving extreme weather events and greater variation in winter temperatures. Action must be taken to prevent this happening."

Co-author, Prof Michael Depledge of University of Exeter Medical School said:

"Studies of the kind we have conducted provide information that is key for policymakers and politicians making plans to manage the impacts of [climate change](#). We're hopeful that the importance of this issue will be understood, so that matters of health and environmental security can be dealt with seriously and effectively."

More information: Paper: dx.doi.org/10.1038/nclimate2121

Provided by University of Exeter

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