

Predicting human response to rising temperatures

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Rising temperatures in Europe are predicted to alter seasonal human death rates, with the highest rates shifting from winter to summer, according to a study in *Nature Communications* this week. These projections indicate that the European society will need to take critical action to attempt to acclimatize to changing temperatures.



The sensitivity of human populations to rising global temperatures is not yet fully understood. Joan Ballester and colleagues describe the link between temperature, humidity and daily mortality in over 200 European regions. Calculating projections of mortality from climate models under greenhouse gas scenario simulations, the authors predict an average drop in human lifespan of up to 3-4 months in 2070-2100. They suggest that summer heat-related mortality rises will completely compensate for the reduction in winter deaths.

How humans adapt culturally, physiologically and behaviourally to changing climate may, however, alter these projections. Indeed, in scenarios where humans rapidly adapt to rising temperatures, Ballester and coworkers predict an increase in human lifespan towards the end of the century.

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