

The economic burden of climate change on health: a case study of increased extreme heat events in Northern Europe

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Abstract

Climate change poses a substantial threat to global health, influencing morbidity, mortality, and disability. These threats are posed by events such as extreme temperatures, as well as extreme weather, including heatwaves, flooding and drought. The economic implications of these health impacts are substantial, requiring a coordinated response. Research on the economic cost of the health impacts of climate change tends to focus primarily on individual country analyses, however this research seeks to bridge this gap by creating an internationally consistent summary measure indicator that will quantify the economic burden of climate change-induced morbidity, mortality, and disability for both physical and mental health conditions.

By estimating the disease burden attributable to a range of climate change risk factors, this project will develop a model that attributes economic costs based on Disability-Adjusted Life Years (DALYs). Initial analysis has studied Northern Europe as a case study, and preliminary results indicate that a rise in extreme heat events is linked to an increase in all-cause mortality in the region. The economic costs, as measured by DALYs, will be further elaborated upon in the presentation. The presentation will also cover the conceptual framework, methodology, and preliminary findings of the project, highlighting the urgency to adopt a global approach to address both the economic and health challenges faced by climate change.