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Facing the human health impacts of a changing climate: evidence from the southern European region

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Extreme weather events caused by climate change, especially extreme heat and cold waves, are expected to increase in the next years. Due to its geographical characteristics, Portugal is among the European countries with the greatest vulnerability to these impacts, affecting disproportionality different socioeconomic groups, especially those with respiratory or circulatory health conditions, children, and the elderly. Set against this background, this study assessed the up-to-date knowledge of the current impact of weather and climate variability on the population health in the Central region of Portugal, namely the epidemiological evidence of the effects of heat waves and extreme cold on human health. The results are enlightening: mortality rates and hospital admissions associated with exposure to extreme temperature indicate growing evidence that climate-health relationships pose increasing health risks. Throughout the region studied, a significantly raised risk of heat-related and cold-related mortality was observed, translated directly by deaths from cardiovascular and respiratory diseases, affecting more elderly people, which altogether with days of prolonged extreme cold increase hospitalization with influenza (flu) and respiratory problems. Climate change presents itself as an urgent public health issue requiring attention to prepare for the future and shape healthier cities, fostering changes that go beyond health services involving structural transformations in the urban environment and in the socioecological relationships between humanity and the planet.

Keywords: Climate-health impacts, Extreme weather events, Socioeconomic vulnerabilities, Healthier cities