



Links between meteorological factors and cardio-respiratory hospital admissions in Athens, Greece.

C. Giannakopoulos (1), B.Psiloglou (1), T. Holt (2), E. Kostopoulou (1)

(1) Institute for Environmental Research and Sustainable Development, National Observatory of Athens, Greece, (2) Climatic Research Unit, University of East Anglia, England

Changes in meteorological conditions, such as an increase in the intensity and frequency of heatwaves or increased air pollution in urban areas, can pose a number of risks to human health. In this study we examine the influence of weather on hospital admissions for cardiovascular and respiratory problems. We compare data from two major hospitals in Athens for approximately 10,000 patients over a 5-year period with hourly meteorological observations for Athens over the same period. The study examines correlations between cardio-respiratory admissions and daily temperature, humidity and air pollution, with particular emphasis on the strength of the relationship between admissions at different times of day and cold and hot weather extremes, and the joint probabilities of heatwaves/pollution events.