

**THE PREDICTED NUMBER OF AIR POLLUTION RELATED
DEATHS IN THE UK DURING THE AUGUST 2003 HEATWAVE**

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There was a major heatwave across much of Europe in the first two weeks of August 2003, during which temperatures peaked at a new record of 38.5°C in the UK. The UK Office for National Statistics have reported an excess of 2045 deaths in England and Wales for period from 4 to 13 August 2003 above the 1998-2002 average for this time of year. Here we estimate, using previously established dose-response functions, that there were between 423 and 769 excess deaths in England and Wales during the first two weeks of August 2003 associated with the elevated ambient ozone and PM10 concentrations. This represents 21 – 38% of the total excess deaths. This has implications for the mitigation of the health effects of heatwave conditions. It reinforces the advice to the public on keeping cool, reducing exposure to outdoor air pollutants and indeed possible measures to reduce atmospheric pollution. The predictions presented here could be verified by conducting a specific epidemiological study of deaths during this heatwave.