

Heat-driven air conditioning may contribute to additional deaths

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(HealthDay)—In what can be described as a vicious catch-22,



approximately 5 to 9 percent of exacerbated air-pollution-related deaths will be due to increases in power sector emissions from the extra air conditioning use resulting from climate change, according to a study published online July 3 in *PLOS Medicine*.

David W. Abel, from the University of Wisconsin-Madison, and colleagues used an interdisciplinary linked model system to quantify the impacts of heat-driven adaptation through cooling demand for buildings in the eastern United States on air-quality-related health outcomes in a representative midcentury <u>climate</u> scenario.

The researchers found that by midcentury, 3.8 percent of the total increase in <u>fine particulate matter</u> ($PM_{2.5}$) and 6.7 percent of the total increase in ozone (O_3) will be attributable to extra air conditioning use (adaptation). Air conditioning adaptation will account for 654 of the $PM_{2.5}$ -related deaths, a 4.8 percent increase above climate change impacts alone (approximately \$6 billion cost) and 315 of the O_3 -related deaths, an 8.7 percent increase above climate change impacts alone (approximately \$3 billion cost).

"This analysis highlights the need for cleaner energy sources, energy efficiency, and energy conservation to meet our growing dependence on building cooling systems and simultaneously mitigate <u>climate change</u>," the authors write.

More information: <u>Abstract/Full Text</u>

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