

# Heat-driven air conditioning may contribute to additional deaths

August 20 2018

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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 [climate](#) scenario.

The researchers found that by midcentury, 3.8 percent of the total increase in [fine particulate matter](#) (PM<sub>2.5</sub>) and 6.7 percent of the total increase in ozone (O<sub>3</sub>) will be attributable to extra air conditioning use (adaptation). Air conditioning adaptation will account for 654 of the PM<sub>2.5</sub>-related deaths, a 4.8 percent increase above climate change impacts alone (approximately \$6 billion cost) and 315 of the O<sub>3</sub>-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 [climate change](#)," the authors write.

**More information:** [Abstract/Full Text](#)

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