

Singapore links air polluting particles with cardiac arrests

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Research in Singapore confirms a link between tiny particulates in air pollution and sudden cardiac arrests in the general population



Small particles in air pollution in Singapore might have caused sudden cardiac arrests in some people who were not in hospital but simply going about their normal lives, according to scientists at Duke-NUS Medical School working with the National Environment Agency (NEA) as part of the Pan-Asian Resuscitation Outcomes Study (PAROS).

Published in *The Lancet Public Health*, this finding, which is based on data collected between 2010 and 2018, resolves the uncertainty caused by inconsistencies in earlier studies due to limitations in the availability and quality of environmental and disease data.

“We have produced clear evidence of a short-term association of PM_{2.5} with out-of-hospital cardiac arrest, which is a catastrophic event that often results in sudden death,” said Adjunct Assistant Professor Joel Aik, lead investigator of the study from Duke-NUS’ Pre-Hospital & Emergency Research Centre (PERC).

“This study provides strong evidence for the impact of air quality on health and should stimulate policy and ground efforts to manage emissions from key sources that can lead to PM_{2.5} increases and prevent potential harm to public health,” said Professor Marcus Ong, Director of the Health Services & Systems Research Programme and PERC at Duke-NUS and Chairman of PAROS. “New policy interventions, such as phasing out internal combustion engine vehicles, can help to reduce the dangers.”