Air pollution and COVID-19 in England

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Video Byte

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Abstract

This video is based on a preprint. Preprints are preliminary reports that have not undergone peer review. They should not be considered conclusive, used to inform clinical practice, or referenced by the media as validated information. As the COVID-19 pandemic wages on, scientific research is uncovering multiple forces that alter the spread of the disease. One enhancing factor could be air pollution. Researchers at the University of Cambridge recently linked COVID-19 to air pollution levels in England, where more than 45,000 patients have died of COVID-19. Initial findings revealed that regional variations in nitrogen oxide and ozone in particular could predict COVID-19 cases and deaths. The risk of infection was found to be increased by exposure to particulate matter (PM). Such pollution can lead to increased inflammation in the lungs or even help carry the virus that causes COVID-19 across large distances. The data don't offer direct causal evidence linking air pollution to the dynamics of COVID-19, but they do support conclusions drawn by similar studies, including those tying pollution to the SARS outbreak in 2003. And unlike other factors affecting the spread of COVID-19, air pollution is largely preventable, pointing to the importance of creating effective mitigation strategies.