

# Air pollution may contribute to white matter loss in the brain

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In a new study, older women who lived in places with higher air pollution had significantly reduced white matter in the brain. For the study, a research team took brain MRIs of 1403 women who were 71 to 89 years old and used residential histories and air monitoring data to estimate their exposure to air pollution in the previous 6 to 7 years.

The findings suggest that ambient particulate [air pollutants](#) may have a deleterious effect on brain aging.

"Investigating the impact of air pollution on the human brain is a new area of environmental neurosciences. Our study provides the convincing evidence that several parts of the aging brain, especially the [white matter](#), are an important target of neurotoxic effects induced by long-term exposure to fine particles in the ambient air," said Dr. Jiu-Chiuan Chen, lead author of the *Annals of Neurology* study.

**More information:** *Annals of Neurology*, [DOI: 10.1002/ana.24460](https://doi.org/10.1002/ana.24460)

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