

Air Pollution May Contribute to Dementia

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A [new study suggests](#) that air pollution may accelerate brain aging and contribute to the progression of dementia, and women with a specific gene variant are at greater risk than others.

The analysis included 3,647 women ages 65 to 79. From 1995 to 2010, researchers tracked the women's mental ability with well-validated questionnaires and used public data from the Environmental Protection Agency to calculate air pollution levels. The study is in *Translational Psychiatry*.

Women who lived in areas with high concentrations of the fine particulate matter that easily penetrates the lungs, known as PM 2.5, had a 68 percent to 91 percent greater risk for cognitive decline and all-cause dementia than those with the lowest exposure.

But among the women in the study with the highest exposure and two copies of the ApoE4 gene variant, there was a 295 percent increased risk. About 2 percent of the population has two copies of the ApoE4 variant, which by itself is known to increase the risk for Alzheimer's disease.