

Nitrogen dioxide exposure may up risk for Parkinson disease

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(HealthDay)—High nitrogen dioxide exposure may increase the risk for

Parkinson disease (PD), according to a study published online May 17 in *JAMA Neurology*.

Sungyang Jo, M.D., from University of Ulsan in Seoul, South Korea, and colleagues used data from the Korean National Health Insurance Service to identify 78,830 adults ages 40 years and older without PD who lived in Seoul between January 2002 and December 2006. Annual follow-up occurred through December 2015. Participants' residential address at the district level was used to estimate exposure levels to particulate matters (PM_{2.5} and PM₁₀), nitrogen dioxide, ozone, sulfur dioxide, and carbon monoxide.

The researchers found that the mean age at baseline was 54.4 years and 52.1 percent of participants were women. During the study period, there were 338 cases of newly diagnosed PD. There was an [increased risk](#) for PD with exposure to [nitrogen dioxide](#) (hazard ratio for highest versus lowest quartile, 1.41). There were no statistically significant associations observed between exposure to the other air pollutants and PD incidence.

"These findings suggest that regulation of air pollutants might reduce the incidence of PD," the authors write.

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