

Does air pollution during pregnancy affect a child's neurodevelopment?

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A recent study in *Developmental Medicine & Child Neurology* has linked exposure to tiny particles of air pollution—called fine particulate matter—during pregnancy to delays in children's gross motor, fine motor, and personal–social development.

The study from Taiwan included 17,683 full-term infants without [congenital malformations](#) who were assessed through home interviews at 6 months and 18 months of age.

Each 10 $\mu\text{g}/\text{m}^3$ increase in exposure to fine particulate matter during the [second trimester](#) was associated with a 9% higher risk of a delay in gross motor neurodevelopmental milestones, after adjustments. Similar levels of risk were seen for delayed fine motor development and personal–social skills. The authors believed that [fine particulate matter](#) exposure before birth posed stronger effects than such exposure after birth.

"Protection of children from air pollutants needs to be started during their mothers' pregnancy," said corresponding author Yue Leon Guo, MD, MPH, Ph.D., of National Taiwan University Medical School and Hospital.

More information: Air pollution during perinatal period and neurodevelopment in children: a national population study in Taiwan, *Developmental Medicine & Child Neurology* (2022). [DOI: 10.1111/dmcn.15430](#)

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