

# **Long-Term Consequences of Air Pollution: Does Age or Years of Exposure Matter?**

## **Abstract**

This paper examines the long-term impacts of early childhood pollution exposure by exploiting the sharp decrease in acid rain in Norway after the enactment of the Convention on Long-Range Transboundary Air Pollution. We combine a difference-in-differences and a movers' design to analyze the outcomes between cohorts born in municipalities before and after a significant decrease in pollution exposure relative to those same cohorts born in municipalities with little initial exposure. We find that a higher pollution level is associated with lower academic performance and that children are most vulnerable to pollution exposure before the age of 4 years.

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