



Long-term exposures to air pollutants affect F_{eNO} in children: a longitudinal study

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Annual average $PM_{2.5}$ and NO_2 were associated with airway inflammation as measured by F_{eNO} in schoolchildren, adding new evidence that long-term exposure affects F_{eNO} beyond the well-documented short-term effects <https://bit.ly/3CGfYXN>

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To the Editors:

Fractional exhaled nitric oxide (F_{eNO}) is a marker of airway inflammation shown to be responsive to short-term air pollution exposures [1–4]. Although a number of cross-sectional studies have related F_{eNO} to either location-based proxies for long-term exposures to traffic/industrial activity or long-term (seasonal to annual average) ambient pollution [5–9], there is lack of longitudinal study and the effects of longer-term air pollution exposures on F_{eNO} are still not well studied, especially for school children. To fill the knowledge gap, we conducted a new study on longitudinal assessments of F_{eNO} to air pollutant exposures in the Southern California Children’s Health Study (CHS) to determine whether F_{eNO} is a marker for chronic effects of air pollution exposures after accounting for short-term exposures.