

ZMATH 06676889

Marcotte, Dave E.

Something in the air? Air quality and children's educational outcomes.

Econ. Educ. Rev. 56, 141-151 (2017).

Summary: Poor air quality has been shown to harm the health and development of children. Research on these relationships has focused almost exclusively on the effects of human-made pollutants, and has not fully distinguished between contemporaneous and long-run effects. This paper contributes on both of these fronts. Merging data on ambient levels of human-made pollutants and plant pollen with detailed panel data of children beginning kindergarten in 2010, I study the relationship between poor air quality on achievement in early grades. I also provide tentative estimates of the effects of air quality in the first years of life on school-readiness. I find that students score between 1 to 2 percent lower on math and reading scores on days with high levels of pollen or fine airborne particulate matter, and that asthmatic students score about 10 percent lower on days with high levels of ozone. I find suggestive evidence that poor air quality during early childhood negatively affects school readiness.

Classification: C60 C30

doi:10.1016/j.econedurev.2016.12.003