

COVID-19 Lockdowns, Air Quality and Health Outcomes: Evidence from Brazil's Largest Metropolitan Area

RESUMO

This paper investigates the effects of COVID-19 lockdowns on air quality and health outcomes in the Sao Paulo Metropolitan Area, Brazil. Using a dynamic difference-in-differences approach, we analyze the impact of reduced economic activity on pollutants such as particulate matter, sulfur dioxide, and nitrogen dioxide. While PM_{2.5}, PM₁₀, and SO₂ experienced temporary reductions, the effects dissipated within months. Furthermore, despite these pollution decreases, respiratory-related hospital admissions increased, likely driven by COVID-19 infections. Our results suggest that the pandemic had a more significant impact on health outcomes than the temporary improvements in air quality.

Palavras-Chave: Air Pollution / Covid-19 / Difference-in-difference