Air Pollution and Infant Health: Lessons from New Jersey
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Abstract
We examine the impact of three “criteria” air pollutants on infant health in New Jersey in the 1990s by combining information about mother’s residential location from birth certificates with information from air quality monitors. Our work offers three important innovations: First, we use the exact addresses of mothers to select those closest to air monitors to improve the accuracy of air quality exposure. Second, we include maternal fixed effects to control for unobserved characteristics of mothers. Third, we examine interactions of air pollution with smoking and other risk factors for poor infant health outcomes. We find consistently negative effects of exposure to carbon monoxide, both during and after birth, with effects considerably larger for smokers and older mothers. Since automobiles are the main source of carbon monoxide emissions, our results have important implications for regulation of automobile emissions.