

Fetal Exposures to Toxic Releases and Infant Health

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Abstract

Every year, millions of pounds of toxic chemicals thought to be linked to developmental problems in fetuses and young children are released into the air. In this paper we estimate the effect of these releases on the health of newborns. Using data from the Toxic Release Inventory Program and Vital Statistics Natality and Mortality files, we find significant negative effects of prenatal exposure to toxicants on gestation and birth weight. We also find that several developmental chemicals increase the probability of infant death. The effect is quite sizeable: the reported reductions in cadmium, toluene, and epichlorohydrin releases during the 90s could account for about 3.9 percent of the overall decrease in infant mortality. Our results are robust to several specification checks, such as comparing developmental to non-developmental chemicals, and fugitive air releases to stack air releases.