

The Social Gradient in the Impact of the Chernobyl Accident: The Case of Austria

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In this paper we examine the impact of the Chernobyl accident on the Austrian fall 1986 birth cohort. Our identification strategy exploits random variation in the exposure to radioactive fallout (over time and) between municipalities due to geographic differences in precipitation after the accident. In contrast to existing literature (see, Almond et al, QJE, 2009) we distinguish two causal channels: (i) radiation effects, i.e. a true causal effect of radioactive fallout, and (ii) non-radiation effects due to behavioral adjustment of parents. Further we add evidence on later-life outcomes, as well as, effects on treated mothers. We find that radiation increases the incidence of perinatal mortality (especially among low-educated mothers) and leads to positively selected newborn. Twenty-five years later treated mothers with low-education have still less offspring, and are more likely to be active on the labor market. An equivalent effect for treated mothers with higher education is not present. In contrast, concerning non-radiation effects evidence is concentrated among highly educated mothers. We find evidence for some harming behavior resulting in a higher incidence of miscarriages and lower birth weight.