

Online appendix for “Placebo Tests” for the Impacts of Air Pollution on Health: The Challenge of Limited Healthcare Infrastructure

By BRUNA GUIDETTI *, PAULA PEREDA† AND EDSON SEVERNINI‡

Table A1—: Impacts of wind speed on PM10 –
First stage

	PM_t
ws_t	- 0.68*** (0.056)
ws_{t-1}	- 0.21*** (0.050)
Dep. var. mean	2.99
Kleibergen-Paap rk Wald F-statistic	84.39
Number of districts	85
Number of days	1095
Observations	89492

Notes: This table reports the first stage results for PM_t (in $10\mu\text{g}/\text{m}^3$). We use districts whose centroid is within 5km from a pollution monitor. We include district, day-of-week, month-of-year, and year fixed effects. We also add temperature and humidity in quadratic form as controls. Standard errors in parentheses are two-way clustered by district and calendar date. Regressions are weighted by children population. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

* Department of Economics, University of Michigan. Email address: guidetti@umich.edu.

† Department of Economics, University of Sao Paulo. Email address: pereda@usp.br.

‡ Heinz College, Carnegie Mellon University. Email address: edsons@andrew.cmu.edu.

Table A2—: OLS coefficients of PM impacts on public hospitalizations – Children 1-5 years old

	Panel A: Respiratory Diseases			
	Respiratory	Asthma	Pneumonia	Influenza
PM_t	0.65 (0.465)	0.10 (0.113)	0.27 (0.278)	0.03* (0.017)
Dep. var. mean	62.57	6.63	34.21	0.18
	Panel B: Non-respiratory Diseases			
	Epilepsy	Phimosis	Appendicitis	Bone Fracture
PM_t	0.07 (0.053)	0.13 (0.145)	0.03 (0.029)	0.03 (0.034)
Dep. var. mean	2.32	7.60	0.82	0.94
Number of districts	85	85	85	85
Number of days	1095	1095	1095	1095
Observations	89492	89492	89492	89492

Notes: Hospitalization rate is measured as the number of hospital admissions per one million children aged one to five. The table displays the effects on respiratory and non-respiratory diseases (elective care procedures: epilepsy-related procedures and phimosis surgery; and urgent procedures: appendectomy, and bone fracture repair). Each column in each panel reports coefficients from a different regression. We use 85 districts whose centroid is within 5km from a pollution monitor, and 1,095 days. We include district, day-of-week, month-of-year, and year fixed effects, as well as temperature and humidity in quadratic form as controls. Standard errors in parentheses are two-way clustered by district and calendar date. Regressions are weighted by children population. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.