

Additional file 6. Univariate results for variables and the multivariate results for the final models and their AIC and adjusted r^2 value in sensitivity analyses using different outcome variables, spatial resolution, and modelling approach. Significance is defined as Yes: p-value <0.05; No: p-value $\geq$ 0.05. Abbreviations: GLM=Generalised linear model; IRIS=Aggregated units for statistical information, NI = Not included

		Sensitivity analysis		
	Cumulative incidence, <i>commune</i> level, GLM	Cumulative incidence, IRIS resolution, GLM	Incidence rate, <i>commune</i> level, GLM	Cumulative incidence, <i>commune</i> level, spatial lag model
Univariate				
Particulate matter <10 μm	Yes	Yes	Yes	Yes
Particulate matter <2.5 μm	Yes	Yes	Yes	Yes
Crowding	Yes	Yes	Yes	Yes
Median income	Yes	Yes	Yes	Yes
Relative humidity	Yes	Yes	Yes	Yes
Air temperature	Yes	Yes	Yes	Yes
Nitrogen dioxide	Yes	No	Yes	No
Road density	Yes	Yes	Yes	Yes
Ozone	No	No	No	No
Multivariate: Final model^a				
Particulate matter <10 μm	Yes; 52.5	Yes;51.7	No;-10.0	Yes;12.8
(Particulate matter <10 μm) ²	Yes;-27.7	No;-25.0	Yes;29.0	No;-6.7
Median income	Yes;-2.5	Yes;-3.9	Yes;-3.1	Yes;-0.8
Air temperature	Yes;22.6	Yes;40.9	Yes;36.6	No;3.8
AIC ^b	6103	7066	6709	5730
Adjusted r^2	0.39	0.12	0.09	NI

^a Outcome $\sim$ Median income + Particulate matter <10 μm + I(Particulate matter <10 μm ^2) +

Air temperature $\pm$ spatial weights, ^b AIC to be compared with caution as datasets differ.

“Cumulative incidence, *commune* level, GLM” and “Cumulative incidence, *commune* level, spatial lag model” are fully comparable.