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Supplemental Material

Air Pollution and Percent Emphysema Identified by Computed Tomography in the Multi-Ethnic Study of Atherosclerosis

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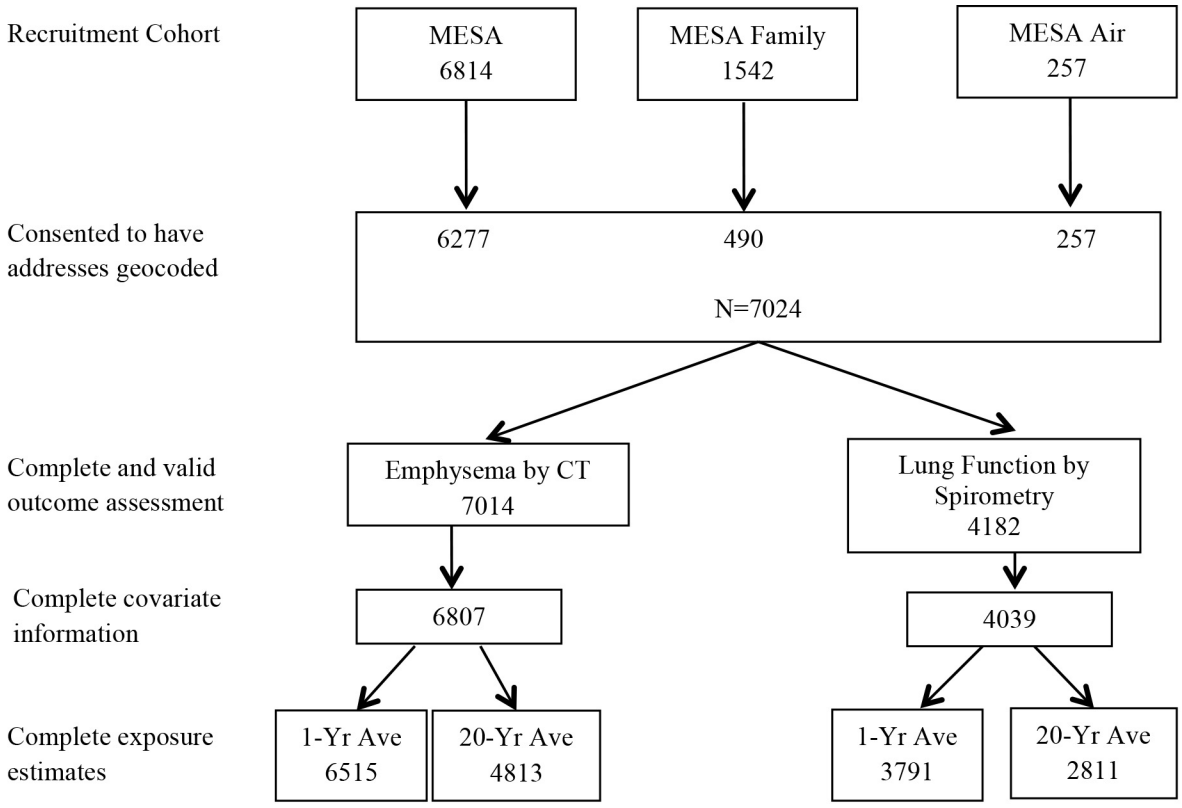

Figure S1. Sample size for various endpoints and exposures.

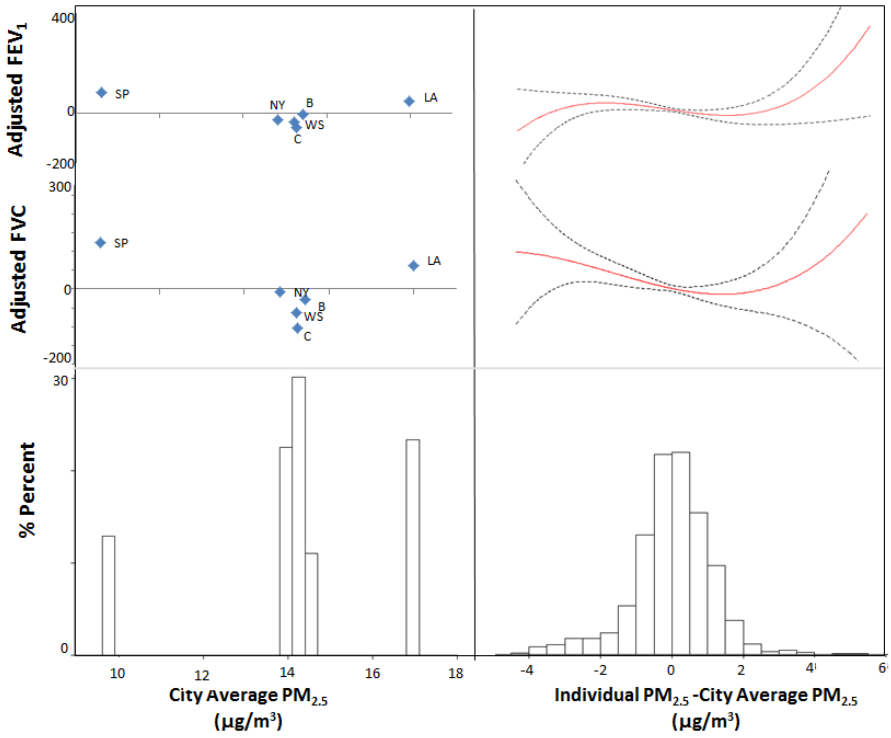

Figure S2. Adjusted lung function vs. $PM_{2.5}$ concentrations expressed as between-site (city average) and within-site (individual concentration - city average) gradients. The left panel illustrates adjusted city mean FEV_1 and FVC vs. city average $PM_{2.5}$ concentrations. This reflects the information provided by between-city contrasts. SP=St Paul, B=Baltimore, NY=New York, WS=Winston Salem, C=Chicago, LA=Los Angeles. The right panel illustrates the continuous dose-response relationship (in red, 95% CI in dashed lines) between adjusted FEV_1 and FVC vs. within-city contrasts in exposures. Overall model included age, race/ethnicity, gender, height, body mass index, education, number of people in household, birth location, smoking information, exam number, detailed smoke exposures, workplace exposures, and history of hay fever. The site-controlled model included an additional fixed effect for study site. In both panels, the bottom of the figure represents a frequency distribution of exposures.

Table S1. Differences in percent emphysema by study site compared to the reference group of Los Angeles in fully adjusted models.

Metropolitan area	Percent emphysema
Winston-Salem, NC	-0.1 (-3.1, 2.9)
New York City, NY	-0.6 (-2.2, 1.0)
Baltimore, MD	-1.6 (-3.7, 0.6)
St.Paul, MN	-7.1 (-9.5, -4.7)
Chicago, IL	-0.8 (-2.2, 0.6)
Los Angeles, CA (referent group)	Referent

Note: Overall model included age, race/ethnicity, gender, height, body mass index, education, number of people in household, birth location, smoking information, exam number, detailed smoke exposures, workplace exposures, history of hay fever, and fine particulate air pollution.