Supplementary Table 1. Associations of prior day (lag 1) district-level PM2.5 and ER visits for respiratory and circulatory diseases. Effect estimates presented as rate ratios (RR) and 95% confidence intervals (CI) per interquartile range (IQR) increase in $PM_{2.5}$.*

Disease	Age Group	n	RR	LCL	UCL	p-value
Respiratory	all	595,174	1.03	1.02	1.04	<0.0001
	<18	261,750	1.03	1.02	1.04	<0.0001
	18-64	109,666	1.09	1.06	1.12	<0.0001
	65+	35,620	0.99	0.95	1.03	0.7512
Infectious Respiratory	all	376,333	1.05	1.03	1.06	<0.0001
	<18	304,075	1.04	1.02	1.05	<0.0001
	18-64	57,055	1.11	1.08	1.15	<0.0001
	65+	15,203	1.02	0.97	1.08	0.3857
Non-infectious respiratory	all	218,841	1.02	1.01	1.04	0.0031
	<18	146,413	1.01	0.99	1.03	0.0708
	18-64	52,011	1.07	1.04	1.11	<0.0001
	65+	20,417	0.98	0.93	1.03	0.3660
Stroke	all	10,239	1.02	1.01	1.04	0.0031
	<18	195	Not converge			
	18-64	4,262	1.07	1.04	1.10	<0.0001
	65+	5,872	0.97	0.93	1.03	0.3660
Ischemic heart disease	all	5,134	1.04	0.94	1.14	0.3973
	<18	83	Not converge			
	18-64	3,059	1.09	0.96	1.23	0.1446
	65+	1,992	0.96	0.82	1.13	0.6726

*IQR for district level PM2.5 was 6.1 ug/m3. Respiratory diseases (RD) J00 - J45, infectious respiratory disease (codes J00-J06, J09 – J22), non-infectious respiratory disease (codes J30-J45). Ischemic heart disease (I20 - I25), and stroke (G45, I63 - I67). Models adjusted for district, temps (quadratics and cubic terms), relative humidity (RH), day of week (DOW) and hospitals.

Supplementary Table 2. Associations of two-day prior (lag 2) district-level PM2.5 and ER visits for respiratory and circulatory diseases. Effect estimates presented as rate ratios (RR) and 95% confidence intervals (CI) per interquartile range (IQR) increase in $PM_{2.5}$.*

Disease	Age Group	n	RR	LCL	UCL	p-value
Respiratory	all	595,174	1.03	1.02	1.04	<0.0001
	<18	261,750	1.02	1.01	1.03	0.0003
	18-64	109,666	1.07	1.04	1.09	<0.0001
	65+	35,620	0.99	0.95	1.03	0.7268
Infectious Respiratory	all	376,333	1.03	1.02	1.04	<0.0001
	<18	304,075	1.02	1.01	1.04	0.0001
	18-64	57,055	1.09	1.05	1.12	<0.0001
	65+	15,203	1.01	0.96	1.07	0.5676
Non-infectious respiratory	all	218,841	1.02	1.00	1.03	0.0112
	<18	146,413	1.02	0.99	1.03	0.0674
	18-64	52,011	1.05	1.02	1.09	0.0014
	65+	20,417	0.98	0.93	1.02	0.5390
Stroke	all	10,239	1.02	0.95	1.09	0.6298
	<18	195	Not converge			
	18-64	4,262	1.00	0.90	1.11	0.9630
	65+	5,872	1.02	0.94	1.11	0.5878
Ischemic heart disease	all	5,134	1.04	0.94	1.14	0.4169
	<18	83	Not converge			
	18-64	3,059		0.95	1.22	0.2072
	65+	1,992		0.83	1.51	0.8119

*IQR for district level PM2.5 was 6.1 ug/m3. Respiratory diseases (RD) J00 - J45, infectious respiratory disease (codes J00-J06, J09 – J22), non-infectious respiratory disease (codes J30-J45). Models adjusted for district, temps (quadratics and cubic terms), relative humidity (RH), day of week (DOW) and hospitals.