

Supplementary Appendix

Table S1. ICD 10 codes for diseases of the circulatory system, or cardiovascular diseases.

Cardiovascular Diseases (I00-I99)	
Acute rheumatic fever	I00-I02
Chronic rheumatic heart diseases	I05-I09
Hypertensive diseases	I10-I16
Ischemic heart diseases	I20-I25
Pulmonary heart disease and diseases of pulmonary circulation	I26-I28
Other forms of heart disease	I30-I52
Cerebrovascular diseases	I60-I69
Diseases of arteries, arterioles, and capillaries	I70-I79
Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified	I80-I89
Other and unspecified disorders of the circulatory system	I95-I99

Table S2. ICD 10 codes for diseases of the respiratory system.

Respiratory Diseases (J00-J99)	
Acute upper respiratory infections	J00-J06
Influenza and pneumonia	J09-J18
Other acute lower respiratory infections	J20-J22
Other diseases of the upper respiratory tract	J30-J39
Chronic lower respiratory diseases	J40-J47
Lung diseases due to external agents	J60-J70
Other respiratory diseases principally affecting the interstitium	J80-J84
Suppurative and necrotic conditions of the lower respiratory tract	J85-J86

Other diseases of the pleura	J90-J94
Other diseases of the respiratory system	J95-J99

Table S3. Correlation across different temperature metrics.

	Mean Daily Temperature	Max Daily Temperature	Min Daily Temperature	Daily Temperature Range
Mean Daily Temperature	1	0.86	0.8	0.15
Max Daily Temperature		1	0.46	0.59
Min Daily Temperature			1	-0.45
Daily Temperature Range				1

Table S4. Correlation matrix of daily ozone across monitoring stations.

	AJM	AJU	BJU	CAM	CCA	CUA	GAM	HGM	IZT	MER	MGH	MPA	PED	SFE	TAH	UAX	UIZ
AJM	1	0.77	0.91	0.85	0.93	0.92	0.85	0.9	0.89	0.88	0.91	0.92	0.94	0.91	0.9	0.92	0.66
AJU		1	0.76	0.66	0.77	0.72	0.73	0.74	0.78	0.73	0.72	0.79	0.73	0.66	0.81	0.8	0.56
BJU			1	0.93	0.98	0.93	0.93	0.98	0.96	0.94	0.97	0.85	0.96	0.93	0.89	0.95	0.71
CAM				1	0.9	0.91	0.93	0.95	0.91	0.93	0.95	0.79	0.9	0.9	0.83	0.89	0.67
CCA					1	0.93	0.9	0.96	0.94	0.93	0.95	0.86	0.96	0.93	0.89	0.95	0.69
CUA						1	0.89	0.93	0.9	0.92	0.95	0.83	0.93	0.95	0.86	0.91	0.65
GAM							1	0.94	0.92	0.93	0.92	0.8	0.89	0.88	0.85	0.9	0.66
HGM								1	0.96	0.95	0.97	0.84	0.94	0.92	0.89	0.94	0.71
IZT									1	0.92	0.93	0.86	0.92	0.89	0.88	0.94	0.71
MER										1	0.94	0.81	0.92	0.9	0.84	0.91	0.69
MGH											1	0.84	0.95	0.95	0.87	0.93	0.7
MPA												1	0.87	0.84	0.94	0.9	0.62
PED													1	0.94	0.89	0.93	0.68
SFE														1	0.84	0.89	0.66
TAH															1	0.94	0.68
UAX																1	0.72
UIZ																	1

Table S5. Correlation matrix of daily PM 2.5 concentrations across monitoring stations.

	AJM	AJU	BJU	CAM	CCA	HGM	MER	MGH	MPA	UAX	UIZ
AJM	1	0.84	0.89	0.88	0.93	0.84	0.8	0.93	0.89	0.86	0.83
AJU		1	0.72	0.7	0.83	0.7	0.68	0.74	0.84	0.8	0.71
BJU			1	0.92	0.92	0.98	0.95	0.95	0.81	0.89	0.96
CAM				1	0.92	0.92	0.88	0.95	0.78	0.86	0.88
CCA					1	0.89	0.86	0.93	0.85	0.93	0.88
HGM						1	0.96	0.93	0.78	0.88	0.96
MER							1	0.88	0.73	0.84	0.95
MGH								1	0.83	0.87	0.9
MPA									1	0.89	0.78
UAX										1	0.88
UIZ											1

Table S6. Summary of p-values for splines on individual effects. *indicate significance at the 0.05 alpha level.

Predictor	Cause of death	F statistic	P-value
Temperature (lag-2)	All-cause	1.57	0.26
Temperature (lag-2)	Cardiovascular	0.47	0.49
Temperature (lag-2)	Respiratory	0.12	0.71
Temperature (lag-14)	All-cause	5.91	>0.001*
Temperature (lag-14)	Cardiovascular	1.01	0.10
Temperature (lag-14)	Respiratory	1.03	0.37

Ozone (lag-2)	All-cause	4.39	0.009*
Ozone (lag-2)	Cardiovascular	0.97	0.33
Ozone (lag-2)	Respiratory	2.20	0.14
Ozone (lag-14)	All-cause	1.70	0.13
Ozone (lag-14)	Cardiovascular	0.84	0.42
Ozone (lag-14)	Respiratory	1.70	0.12
PM 2.5 (lag-2)	All-cause	1.68	0.12
PM 2.5 (lag-2)	Cardiovascular	3.36	0.001*
PM 2.5 (lag-2)	Respiratory	0.39	0.68
PM 2.5 (lag-14)	All-cause	1.52	0.19
PM 2.5 (lag-14)	Cardiovascular	0.65	0.42
PM 2.5 (lag-14)	Respiratory	1.68	0.13

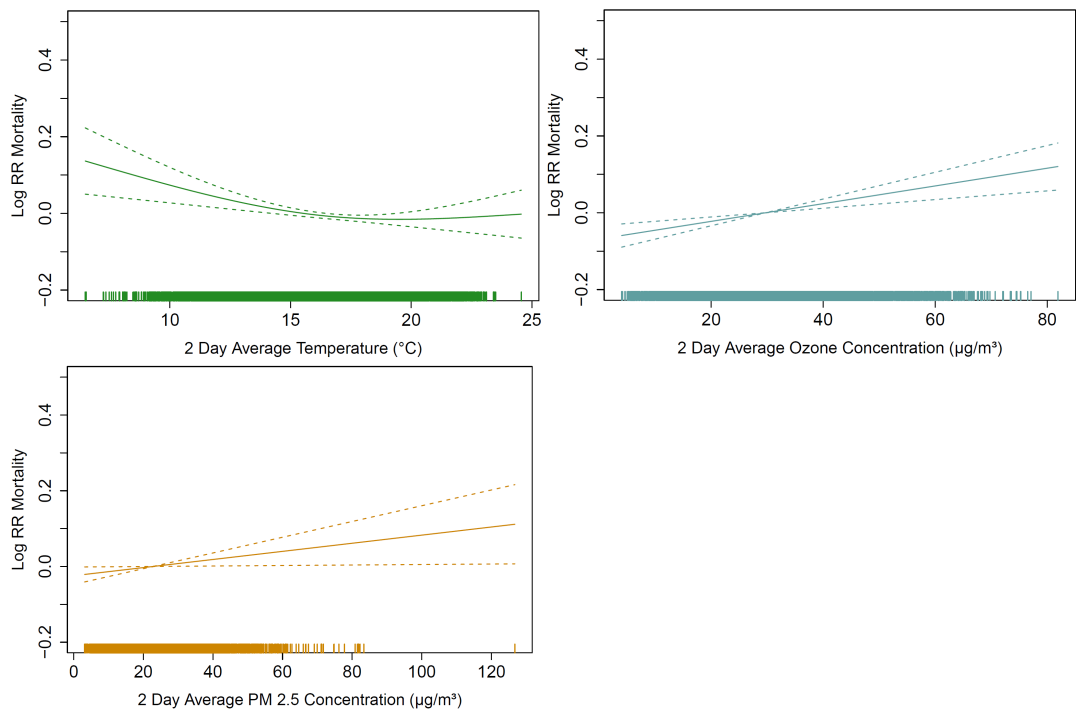


Figure S1. Individual effects of lag-2 temperature and pollution using post-2013 data.

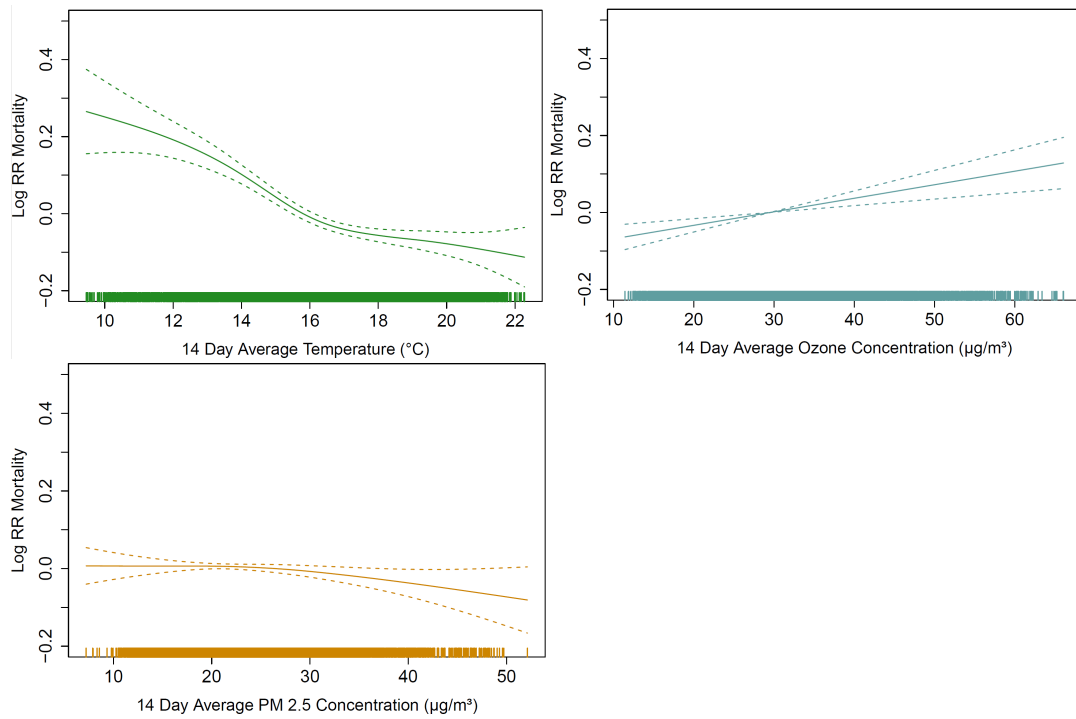


Figure S2. Individual effects of lag-14 temperature and pollution using post-2013 data.

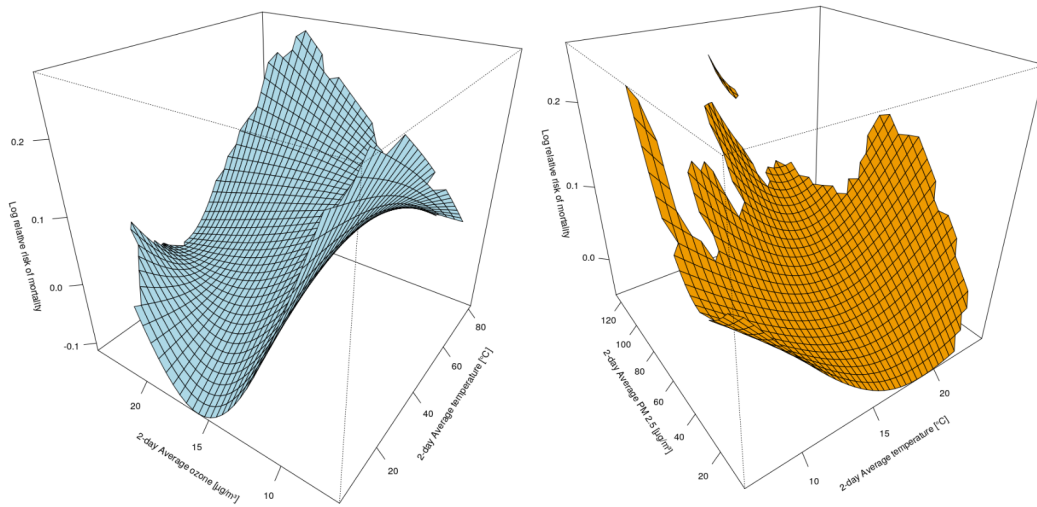


Figure S3. All-cause mortality response surfaces for post-2013 data.