Online Supplement

Does temperature confounding control influence the modifying effect of air temperature in ozone-mortality associations?

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eTable 1. Summary statistics (mean±SD) for daily deaths, ozone, and temperature in eight European cities and 86 U.S. cities.

Region	Country/State	Location	Daily deaths	Ozone [a]	Temperature (℃)
	Greece	Athens	80±12	71±26	19±7
	Spain	Barcelona	41±8	63±28	14±6
	Italy	Rome	58±10	73±37	16±7
	Germany	Augsburg	8±3	69±35	10±8
Europe	Germany	Ruhr	32±6	57±31	11±7
	Denmark	Copenhagen	26±9	33±11	10±7
	Sweden	Stockholm	39±7	65±20	7±8
	Finland	Helsinki	18±5	62±21	6±10
	Average		38	62	12
	Ohio	Akron	4±3	31±13	11±11
	New Mexico	Albuquerque	3±2	28±10	16±9
	Georgia	Atlanta	8±4	25±11	19±8
	Texas	Austin	3±2	27±11	22±8
	California	Bakersfield	3±2	37±16	21±9
	Maryland	Baltimore	7±3	33±13	14±10
	Louisiana	Baton Rouge	3±2	24±10	20±7
	Alabama	Birmingham	6±3	25±9	17±8
	Massachusetts	Boston	4±3	20±12	11±9
	New York	Buffalo	9±5	25±13	10±11
	Iowa	Cedar Rapids	2±1	23±10	11±12
	North Carolina	Charlotte	3±2	33±12	18±8
	Illinois	Chicago	38±16	20±10	11±11
	Ohio	Cincinnati	7±4	26±10	13±10
	Ohio	Cleveland	12±7	28±12	11±10
	Ohio	Columbus, OH	6±3	27±12	13±10
U.S.	Colorado	Colorado Springs	2±1	24±10	10±10
	Texas	Corpus Christi	2±1	26±11	22±6
	Ohio	Dayton	4±3	28±12	12±11
	District of Columbia	Washington	5±3	21±13	14±10
	Colorado	Denver	6±4	20±10	11±11
	Iowa	Des Moines	3±2	16±10	11±12
	Michigan	Detroit	16±6	24±11	11±11
	Texas	Dallas	18±8	27±12	20±9
	Texas	El Paso	3±2	26±10	20±9
	Indiana	Evansville	2±1	37±11	14±10
	California	Fresno	4±3	30±15	20±9
	Indiana	Fort Wayne	2±1	33±11	11±11
	Michigan	Grand Rapids	3±2	29±13	10±11
	North Carolina	Greensboro	3±2	34±11	16±9
	Hawaii	Honolulu	4±3	16±10	25±2
	Texas	Houston	14±6	23±11	21±7
	Alabama	Huntsville	2±1	30±12	17±9
	Indiana	Indianapolis	6±3	32±11	13±11
	Florida	Jacksonville	5±3	26±10	21±6
	New Jersey	Jersey City	4±2	21±14	14±10

Region	Country/State	Location	Daily deaths	Ozone [a]	Temperature (°C)
	Missouri	Kansas City, MO	6±4	30±12	13±11
	Kansas	Kansas City, KS	1±1	24±12	14±11
	New York	Kingston	2±1	35±11	13±9
	Tennessee	Knoxville	3±2	32±11	16±9
	California	Los Angeles	50±23	22±11	17±3
	Nevada	Las Vegas	6±3	31±13	22±10
	Kentucky	Lexington	2±1	33±12	14±10
	Kentucky	Louisville	6±3	24±12	15±10
	Arkansas	Little Rock	3±2	28±11	18±9
	Wisconsin	Madison	2±2	31±11	9±12
	Tennessee	Memphis	6±3	36±10	18±9
	Florida	Miami	15±8	28±10	25±3
	Wisconsin	Milwaukee	8±5	31±12	9±11
	Alabama	Mobile	3±2	28±10	19±7
	Tennessee	Nashville	4±2	21±10	16±9
	Louisiana	New Orleans	4±2	22±10	21±7
	New Jersey	Newark	6±3	17±12	14±10
	New York	New York	63±27	20±11	13±9
U.S.	California	Oakland	8±4	18±8	15±3
	Oklahoma	Oklahoma City	5±3	30±13	17±10
	Nebraska	Omaha	3±2	23±10	12±12
	Florida	Orlando	4±3	25±10	23±5
	Pennsylvania	Philadelphia	14±6	21±13	14±10
	Arizona	Phoenix	15±9	25±10	26±9
	Pennsylvania	Pittsburgh	13±8	22±12	12±10
	Rhode Island	Providence	5±4	29±12	11±9
	North Carolina	Raleigh	2±1	35±11	16±9
	California	Riverside	8±5	34±15	18±5
	New York	Rochester	5±4	24±12	10±11
	California	Sacramento	6±4	26±10	18±7
	Utah	Salt Lake City	4±2	32±10	13±11
	Texas	San Antonio	7±4	24±10	22±8
	California	San Bernardino	7±4	37±16	18±5
	California	San Diego	15±9	29±10	18±3
	California	San Jose	7±4	18±8	15±3
	Washington	Seattle	9±6	22±8	12±6
	Louisiana	Shreveport	3±2	29±10	19±8
	Washington	Spokane	3±2	33±8	10±10
	California	Santa Ana	12±7	25±11	17±3
	Missouri	St. Louis	4±2	25±10	15±11
	California	Stockton	3±2	24±10	18±7
	Florida	St. Petersburg	10±8	26±11	23±5
	New York	Syracuse	4±2	23±12	10±11
	Washington	Tacoma	4±2	18±8	12±6
	Florida	Tampa	6±3	27±11	23±5
	Ohio	Toledo	4±2	28±12	11±11
	Arizona	Tucson	5±3	28±9	23±9
	Oklahoma	Tulsa	4±2	31±12	17±10
	Kansas	Wichita	3±2	27±12	15±11

Region	Country/State	Location	Daily deaths	Ozone [a]	Temperature (°C)
	Massachusetts	Worcester	5±4	31±13	9±10
	Ohio	Akron	4±3	31±13	11±11
	New Mexico	Albuquerque	3±2	28±10	16±9
	Georgia	Atlanta	8±4	25±11	19±8
	Texas	Austin	3±2	27±11	22±8
	California	Bakersfield	3±2	37±16	21±9
	Maryland	Baltimore	7±3	33±13	14±10
	Louisiana	Baton Rouge	3±2	24±10	20±7
	Alabama	Birmingham	6±3	25±9	17±8
	Massachusetts	Boston	4±3	20±12	11±9
	New York	Buffalo	9±5	25±13	10±11
	Iowa	Cedar Rapids	2±1	23±10	11±12
	North Carolina	Charlotte	3±2	33±12	18±8
	Illinois	Chicago	38±16	20±10	11±11
	Ohio	Cincinnati	7±4	26±10	13±10
	Ohio	Cleveland	12±7	28±12	11±10
	Ohio	Columbus, OH	6±3	27±12	13±10
	Colorado	Colorado Springs	2±1	24±10	10±10
U.S.	Texas	Corpus Christi	2±1	26±11	22±6
	Ohio	Dayton	4±3	28±12	12±11
	District of Columbia	Washington	5±3	21±13	14±10
	Colorado	Denver	6±4	20±10	11±11
	Iowa	Des Moines	3±2	16±10	11±12
	Michigan	Detroit	16±6	24±11	11±11
	Texas	Dallas	18±8	27±12	20±9
	Texas	El Paso	3±2	26±10	20±9
	Indiana	Evansville	2±1	37±11	14±10
	California	Fresno	4±3	30±15	20±9
	Indiana	Fort Wayne	2±1	33±11	11±11
	Michigan	Grand Rapids	3±2	29±13	10±11
	North Carolina	Greensboro	3±2	34±11	16±9
	Hawaii	Honolulu	4±3	16±10	25±2
	Texas	Houston	14±6	23±11	21±7
	Alabama	Huntsville	2±1	30±12	17±9
	Indiana	Indianapolis	6±3	32±11	13±11
	Florida	Jacksonville	5±3	26±10	21±6
	New Jersey	Jersey City	4±2	21±14	14±10
	Missouri	Kansas City, MO	6±4	30±12	13±11
	Kansas	Kansas City, KS	1±1	24±12	14±11
	New York	Kingston	2±1	35±11	13±9
	Tennessee	Knoxville	3±2	32±11	16±9
	California	Los Angeles	50±23	22±11	17±3
	Nevada	Las Vegas	6±3	31±13	22±10
	Kentucky	Lexington	2±1	33±12	14±10
	Kentucky	Louisville	6±3	24±12	15±10
	Arkansas	Little Rock	3±2	28±11	18±9
	Wisconsin	Madison	2±2	31±11	9±12
	Tennessee	Memphis	6±3	36±10	18±9

Region	Country/State	Location	Daily deaths	Ozone [a]	Temperature (℃)
	Florida	Miami	15±8	28±10	25±3
	Wisconsin	Milwaukee	8±5	31±12	9±11
	Alabama	Mobile	3±2	28±10	19±7
	Tennessee	Nashville	4±2	21±10	16±9
	Louisiana	New Orleans	4±2	22±10	21±7
	New Jersey	Newark	6±3	17±12	14±10
	New York	New York	63±27	20±11	13±9
	California	Oakland	8±4	18±8	15±3
	Oklahoma	Oklahoma City	5±3	30±13	17±10
	Nebraska	Omaha	3±2	23±10	12±12
	Florida	Orlando	4±3	25±10	23±5
	Pennsylvania	Philadelphia	14±6	21±13	14±10
	Arizona	Phoenix	15±9	25±10	26±9
	Pennsylvania	Pittsburgh	13±8	22±12	12±10
	Rhode Island	Providence	5±4	29±12	11±9
	North Carolina	Raleigh	2±1	35±11	16±9
U.S.	California	Riverside	8±5	34±15	18±5
	New York	Rochester	5±4	24±12	10±11
	California	Sacramento	6±4	26±10	18±7
	Utah	Salt Lake City	4±2	32±10	13±11
	Texas	San Antonio	7±4	24±10	22±8
	California	San Bernardino	7±4	37±16	18±5
	California	San Diego	15±9	29±10	18±3
	California	San Jose	7±4	18±8	15±3
	Washington	Seattle	9±6	22±8	12±6
	Louisiana	Shreveport	3±2	29±10	19±8
	Washington	Spokane	3±2	33±8	10±10
	California	Santa Ana	12±7	25±11	17±3
	Missouri	St. Louis	4±2	25±10	15±11
	California	Stockton	3±2	24±10	18±7
	Florida	St. Petersburg	10±8	26±11	23±5
	New York	Syracuse	4±2	23±12	10±11
	Washington	Tacoma	4±2	18±8	12±6
	Florida	Tampa	6±3	27±11	23±5
	Ohio	Toledo	4±2	28±12	11±11
	Arizona	Tucson	5±3	28±9	23±9
	Oklahoma	Tulsa	4±2	31±12	17±10
	Kansas	Wichita	3±2	27±12	15±11
	Massachusetts	Worcester	5±4	31±13	9±10
	Average		7	27	16

a Ozone unit was μg/m^3 for maximum 8-h average metric in eight European cities, and ppb for 24-h average metric in 86 U.S. cities.

eTable 2. Delta Q-AIC values using nonlinear temperature control methods in eight European cities and 86 U.S. cities (compared with Without sTemp method).

Region	Location	With sTemp: DLNM	With Stemp_heat and Stemp_cold	With Stemp_heat only	With Stemp_cold only
Europe	Athens	-255	-163	-135	-28
	Barcelona	-1111	-438	-201	-365
	Rome	-1738	-987	-621	-545
	Augsburg	-1977	-922	-414	-798
	Ruhr	-771	-276	-131	-193
	Copenhagen	-1852	-768	-380	-679
	Stockholm	-165	-41	-31	-9
	Helsinki	-93	-47	-33	-10
	Average	-995	-455	-243	-328
U.S.	Akron	-35	-9	-4	-2
	Albuquerque	-48	-65	2	-65
	Atlanta	22	-23	-9	-8
	Austin	-43	-55	-2	-51
	Bakersfield	-799	-232	1	-230
	Baltimore	-17	-39	-35	-1
	Baton Rouge	-59	-61	1	-61
	Birmingham	45	-12	-5	-2
	Boston	-24	-13	0	-9
	Buffalo	-60	-125	-16	-104
	Cedar Rapids	-104	-52	-1	-50
	Charlotte	-64	-74	-9	-64
	Chicago	-310	-276	-59	-203
	Cincinnati	-35	-5	2	-2
	Cleveland	-35	-11	-5	0
	Columbus, OH	-43	-9	-5	-1
	Colorado Springs	-605	-197	1	-196
	Corpus Christi	-57	-49	0	-47
	Dayton	-26	-7	-2	-3
	Washington	-109	-112	-9	-100
	Denver	-48	-86	-5	-77
	Des Moines	-119	-57	-1	-54
	Detroit	-154	-169	-47	-119
	Dallas	-109	-165	-9	-149
	El Paso	-453	-210	-3	-205
	Evansville	-12	-2	0	-1
	Fresno	-934	-342	-6	-334
	Fort Wayne	-14	-1	1	-1
	Grand Rapids	-244	-64	-5	-56
	Greensboro	-23	-2	1	0
	Honolulu	-56	-66	0	-62
	Houston	-97	-142	3	-141
	Huntsville	-3	-5	1	-4
	Indianapolis	-28	-7	-3	-1
	Jacksonville	-59	-76	-2	-71
	Jersey City	-65	-94	-4	-88

Region	Location	With sTemp: DLNM	With Stemp_heat and Stemp_cold	With Stemp_heat only	With Stemp_cold only
	Kansas City, MO	-414	-187	-8	-175
	Kansas City, KS	-35	-38	1	-38
	Kingston	13	-1	0	0
	Knoxville	20	-3	1	-1
	Los Angeles	27	-331	-80	-233
	Las Vegas	-383	-159	-13	-143
	Lexington	-16	-5	-2	-1
	Louisville	-255	-90	1	-88
	Little Rock	-28	-192	-1	-188
	Madison	-272	-58	-1	-55
	Memphis	-7	-5	-1	-1
	Miami	0	-207	7	-205
	Milwaukee	-73	-10	-4	-1
	Mobile	21	-10	-4	-4
	Nashville	-53	-76	-5	-67
	New Orleans	-376	-181	-9	-170
	Newark	34	-13	-3	-7
	New York	-197	-492	-153	-317
U.S.	Oakland	-54	-122	-2	-115
	Oklahoma City	-48	-76	0	-73
	Omaha	-51	-282	-1	-279
	Orlando	-53	-71	2	-70
	Philadelphia	-157	-179	-35	-138
	Phoenix	2	-121	2	-116
	Pittsburgh	-53	-146	-12	-122
	Providence	-56	-12	-7	-1
	Raleigh	-20	-1	1	-1
	Riverside	-26	-92	0	-85
	Rochester	-47	-92	-5	-82
	Sacramento	-36	-83	0	-79
	Salt Lake City	-42	-74	-4	-67
	San Antonio	-57	-100	2	-99
	San Bernardino	-47	-114	-5	-106
	San Diego	2	-137	1	-128
	San Jose	-64	-101	-14	-82
	Seattle	101	-9	-3	0
	Shreveport	-52	-73	1	-72
	Spokane	36	-1	2	0
	Santa Ana	-19	-110	-3	-101
	St. Louis	-17	-8	0	-6
	Stockton	-34	-933	-4	-927
	St. Petersburg	9	-172	11	-171
	Syracuse	-46	-75	-1	-70
	Tacoma	29	-9	-5	-1
	Tampa	-55	-76	3	-76
	Toledo	-15	-3	1	-1
	Tucson	-44	-78	-3	-73
	Tulsa	-158	-74	3	-74

Region	Location	With sTemp: DLNM	With Stemp_heat and Stemp_cold	With Stemp_heat only	With Stemp_cold only
	Wichita	-510	-185	2	-184
	Worcester	87	-316	-13	-299
	Akron	-35	-9	-4	-2
	Albuquerque	-48	-65	2	-65
	Atlanta	22	-23	-9	-8
	Austin	-43	-55	-2	-51
	Bakersfield	-799	-232	1	-230
	Baltimore	-17	-39	-35	-1
	Baton Rouge	-59	-61	1	-61
	Birmingham	45	-12	-5	-2
	Boston	-24	-13	0	-9
	Buffalo	-60	-125	-16	-104
	Cedar Rapids	-104	-52	-1	-50
	Charlotte	-64	-74	-9	-64
	Chicago	-310	-276	-59	-203
	Cincinnati	-35	-5	2	-2
	Cleveland	-35	-11	-5	0
	Columbus, OH	-43	-9	-5	-1
	Colorado Springs	-605	-197	1	-196
U.S.	Corpus Christi	-57	-49	0	-47
	Dayton	-26	-7	-2	-3
	Washington	-109	-112	-9	-100
	Denver	-48	-86	-5	-77
	Des Moines	-119	-57	-1	-54
	Detroit	-154	-169	-47	-119
	Dallas	-109	-165	-9	-149
	El Paso	-453	-210	-3	-205
	Evansville	-12	-2	0	-1
	Fresno	-934	-342	-6	-334
	Fort Wayne	-14	-1	1	-1
	Grand Rapids	-244	-64	-5	-56
	Greensboro	-23	-2	1	0
	Honolulu	-56	-66	0	-62
	Houston	-97	-142	3	-141
	Huntsville	-3	-5	1	-4
	Indianapolis	-28	-7	-3	-1
	Jacksonville	-59	-76	-2	-71
	Jersey City	-65	-94	-4	-88
	Kansas City, MO	-414	-187	-8	-175
	Kansas City, KS	-35	-38	1	-38
	Kingston	13	-1	0	0
	Knoxville	20	-3	1	-1
	Los Angeles	27	-331	-80	-233
	Las Vegas	-383	-159	-13	-143
	Lexington	-16	-5	-2	-1
	Louisville	-255	-90	1	-88
	Little Rock	-28	-192	-1	-188
	Madison	-272	-58	-1	-55

Region	Location	With sTemp: DLNM	With Stemp_heat and Stemp_cold	With Stemp_heat only	With Stemp_cold only
	Memphis	-7	-5	-1	-1
	Miami	0	-207	7	-205
	Milwaukee	-73	-10	-4	-1
	Mobile	21	-10	-4	-4
	Nashville	-53	-76	-5	-67
	New Orleans	-376	-181	-9	-170
	Newark	34	-13	-3	-7
	New York	-197	-492	-153	-317
	Oakland	-54	-122	-2	-115
	Oklahoma City	-48	-76	0	-73
	Omaha	-51	-282	-1	-279
	Orlando	-53	-71	2	-70
	Philadelphia	-157	-179	-35	-138
	Phoenix	2	-121	2	-116
	Pittsburgh	-53	-146	-12	-122
	Providence	-56	-12	-7	-1
	Raleigh	-20	-1	1	-1
U.S.	Riverside	-26	-92	0	-85
	Rochester	-47	-92	-5	-82
	Sacramento	-36	-83	0	-79
	Salt Lake City	-42	-74	-4	-67
	San Antonio	-57	-100	2	-99
	San Bernardino	-47	-114	-5	-106
	San Diego	2	-137	1	-128
	San Jose	-64	-101	-14	-82
	Seattle	101	-9	-3	0
	Shreveport	-52	-73	1	-72
	Spokane	36	-1	2	0
	Santa Ana	-19	-110	-3	-101
	St. Louis	-17	-8	0	-6
	Stockton	-34	-933	-4	-927
	St. Petersburg	9	-172	11	-171
	Syracuse	-46	-75	-1	-70
	Tacoma	29	-9	-5	-1
	Tampa	-55	-76	3	-76
	Toledo	-15	-3	1	-1
	Tucson	-44	-78	-3	-73
	Tulsa	-158	-74	3	-74
	Wichita	-510	-185	2	-184
	Worcester	87	-316	-13	-299
	Average	-97	-103	-7	-92

eTable 3. Average of generalized cross validation (GCV) scores using different degree of freedom (df) per year for time trend in different temperature control models.

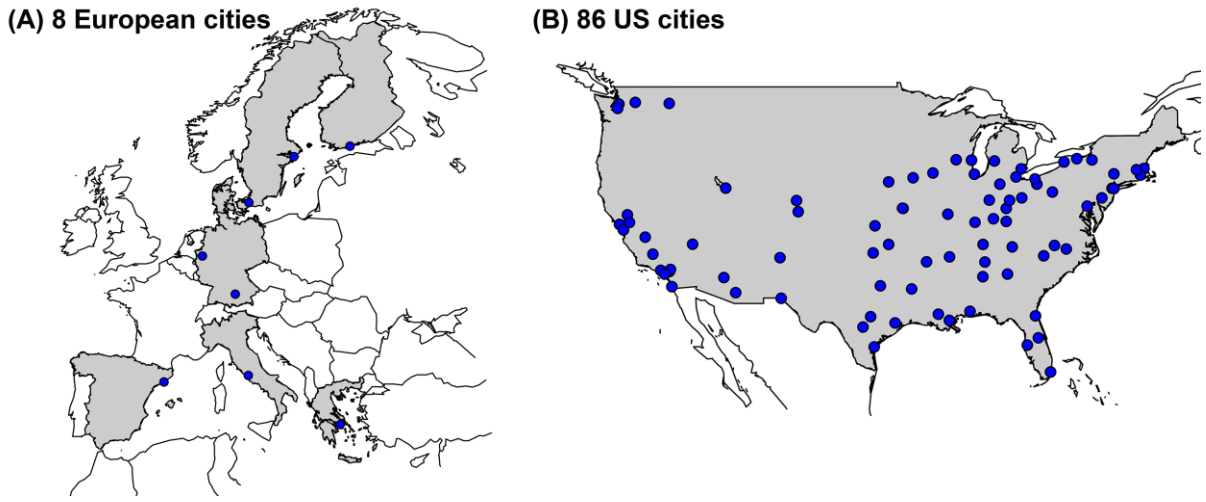
Region	Temperature control methods	Df per year for time trend		
		6	8	10
European 8 cities	Without sTemp	1.13	1.12	1.12
	sTemp: DLNM	1.09	1.09	1.09
	sTemp_heat+sTemp_cold	1.10	1.09	1.09
	sTemp_heat	1.10	1.09	1.10
	sTemp_cold	1.12	1.12	1.12
U.S. 86 cities	Without sTemp	1.88	1.88	1.88
	sTemp: DLNM	1.88	1.88	1.89
	sTemp_heat+sTemp_cold	1.88	1.88	1.88
	sTemp_heat	1.88	1.88	1.88
	sTemp_cold	1.88	1.88	1.88

eTable 4. Percent increase (95% CI) in daily nonaccidental mortality associated with a 10 $\mu g/m^3$ increase in tomorrow's maximum 8-h average ozone in eight European cities or a 10 ppb increase in tomorrow's 24-h average ozone in 86 U.S. cities using different temperature control methods and different degree of freedom (df) per year for time trend.

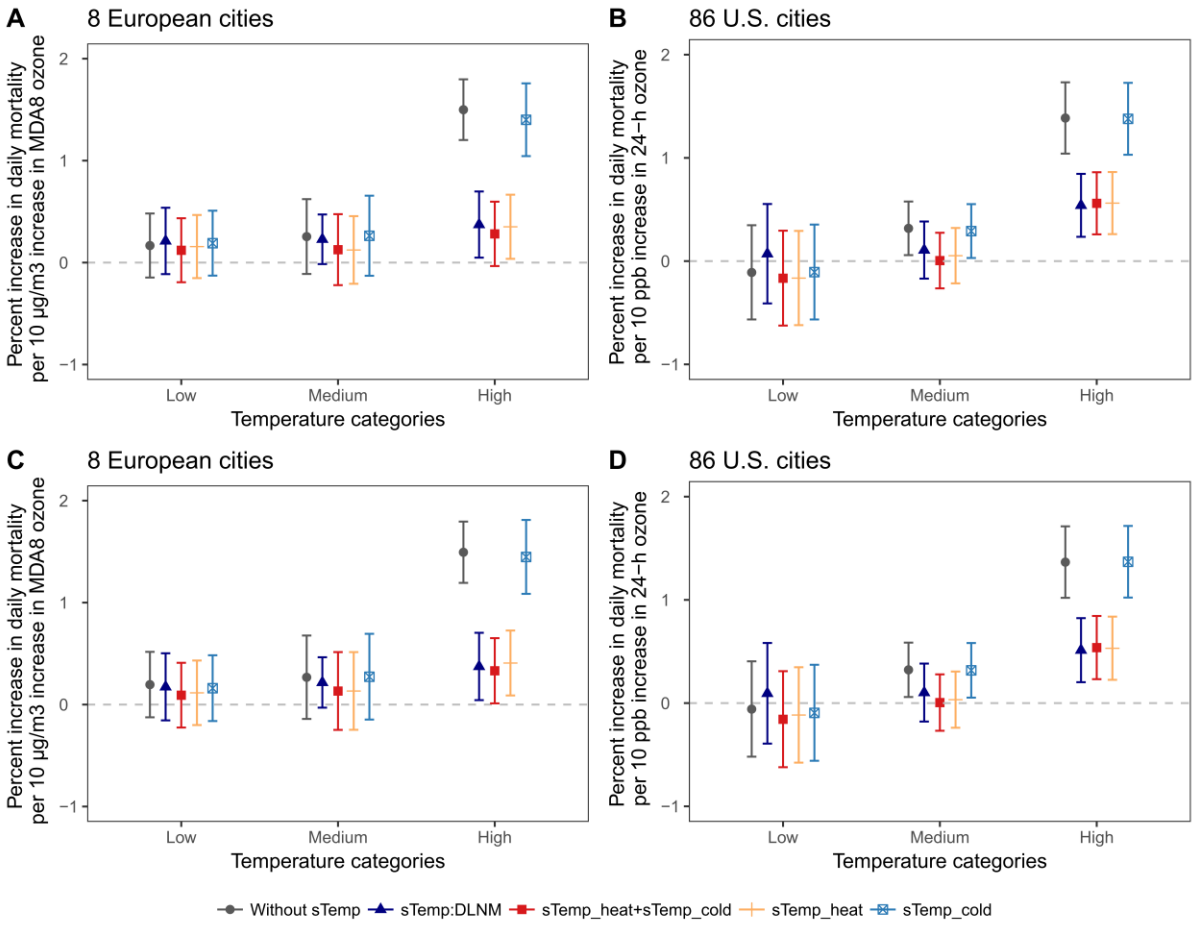
Region	Temperature control methods	Df per year for time trend		
		6	8	10
European 8 cities	Without sTemp	0.18 (0.00, 0.35)	0.21 (0.04, 0.39)	0.20 (0.01, 0.40)
	sTemp: DLNM	-0.02 (-0.21, 0.18)	0.00 (-0.23, 0.22)	-0.01 (-0.23, 0.21)
	sTemp_heat+sTemp_cold	0.03 (-0.15, 0.21)	0.02 (-0.18, 0.23)	0.03 (-0.18, 0.24)
	sTemp_heat	0.02 (-0.15, 0.20)	0.03 (-0.16, 0.23)	0.03 (-0.17, 0.24)
	sTemp_cold	0.20 (0.03, 0.38)	0.21 (0.01, 0.41)	0.21 (0.01, 0.41)
U.S. 86 cities	Without sTemp	0.23 (0.06, 0.39)	0.22 (0.06, 0.39)	0.23 (0.06, 0.39)
	sTemp: DLNM	0.00 (-0.17, 0.17)	-0.02 (-0.19, 0.15)	-0.02 (-0.19, 0.16)
	sTemp_heat+sTemp_cold	0.14 (-0.02, 0.31)	0.13 (-0.04, 0.29)	0.13 (-0.04, 0.29)
	sTemp_heat	0.14 (-0.02, 0.31)	0.13 (-0.03, 0.30)	0.13 (-0.03, 0.30)
	sTemp_cold	0.22 (0.06, 0.38)	0.22 (0.05, 0.38)	0.22 (0.06, 0.39)

eTable 5. Percent increase (95% CI) in daily nonaccidental mortality associated with a 10 μg/m^3 increase in tomorrow's maximum 8-h average ozone in eight European cities or a 10 ppb increase in tomorrow's 24-h average ozone in 86 U.S. cities using different temperature control methods and different cut-offs for temperature categories.

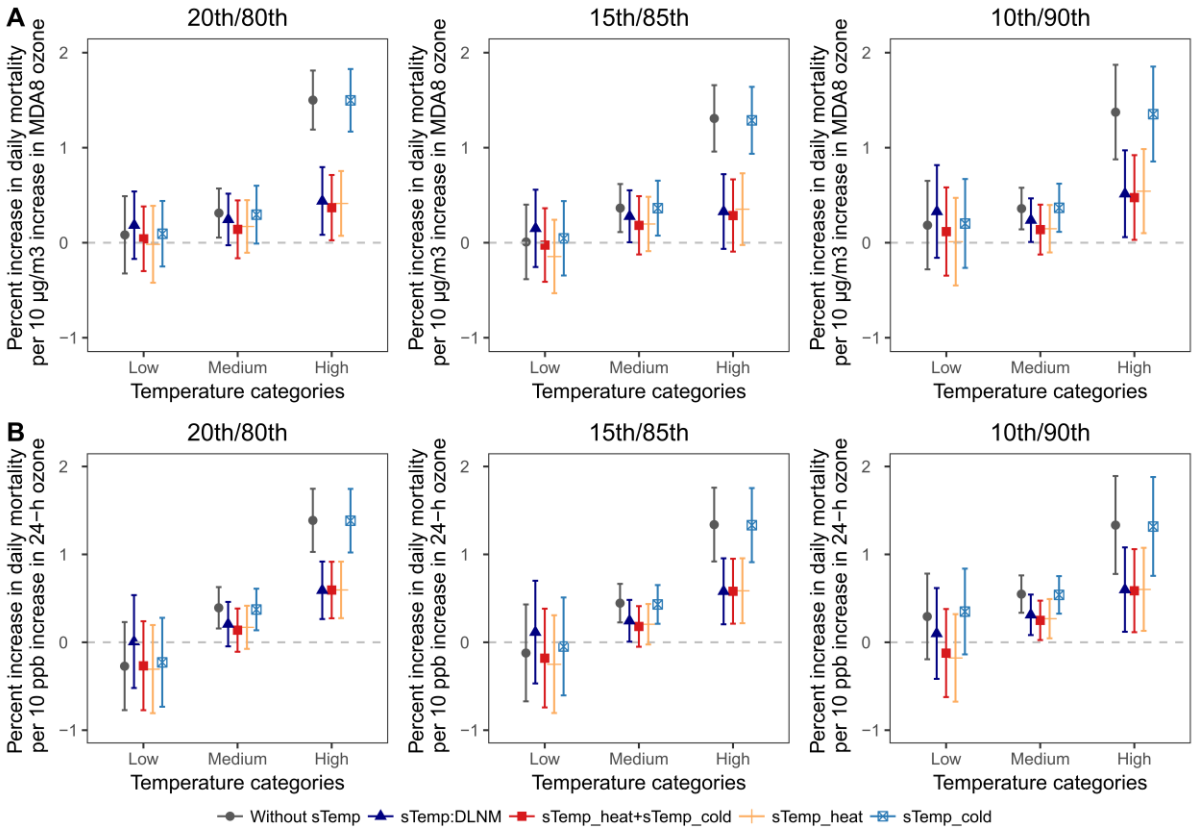
Region	Temperature control methods	Cut-offs for temperature categories		
		$20^{th}/80^{th}$	$15^{th}/85^{th}$	$10^{th}/90^{th}$
European 8 cities	Without sTemp	0.18 (0.00, 0.35)	0.18 (0.01, 0.36)	0.15 (-0.02, 0.32)
	sTemp: DLNM	0.01 (-0.17, 0.18)	-0.01 (-0.19, 0.18)	0.01 (-0.17, 0.19)
	sTemp_heat+sTemp_cold	-0.02 (-0.22, 0.17)	-0.01 (-0.20, 0.19)	-0.01 (-0.20, 0.18)
	sTemp_heat	0.00 (-0.17, 0.18)	-0.01 (-0.19, 0.17)	0.00 (-0.17, 0.18)
	sTemp_cold	0.20 (0.02, 0.37)	0.20 (0.02, 0.37)	0.17 (0.00, 0.35)
U.S. 86 cities	Without sTemp	0.22 (0.05, 0.38)	0.21 (0.05, 0.38)	0.22 (0.05, 0.38)
	sTemp: DLNM	0.00 (-0.17, 0.17)	0.00(-0.17, 0.17)	0.00 (-0.17, 0.17)
	sTemp_heat+sTemp_cold	0.14 (-0.03, 0.30)	0.13 (-0.03, 0.30)	0.14 (-0.03, 0.30)
	sTemp_heat	0.14 (-0.02, 0.31)	0.14 (-0.02, 0.31)	0.15 (-0.02, 0.31)
	sTemp_cold	0.21 (0.05, 0.37)	0.21 (0.04, 0.37)	0.21 (0.04, 0.37)



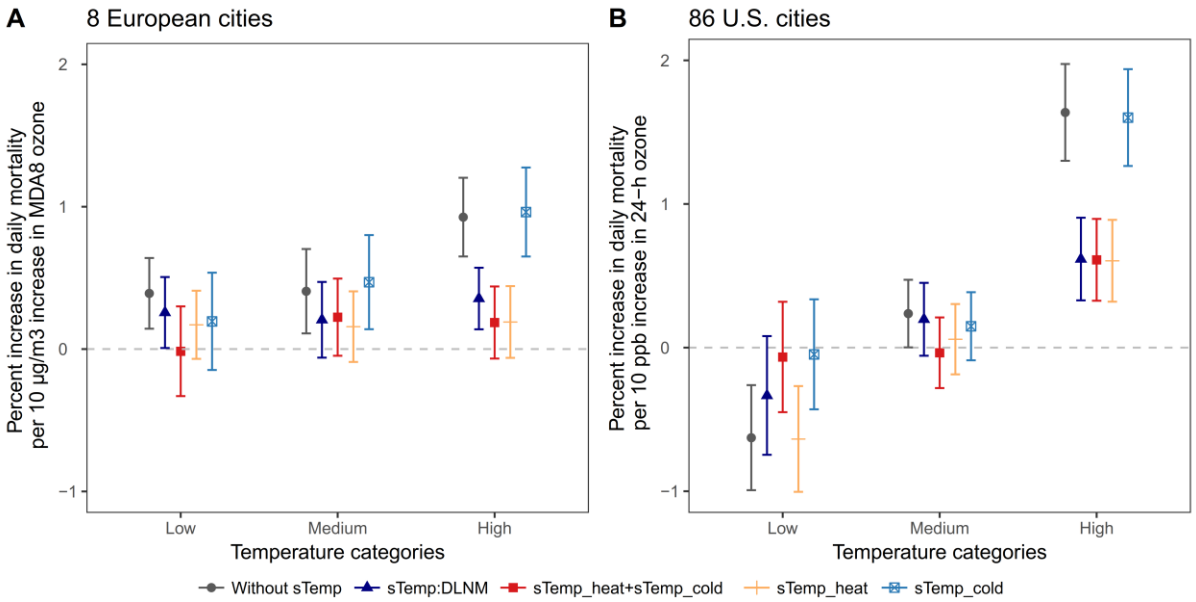
eFigure 1. Geographical distributions of the eight European cities and 86 U.S. cities included in this study.



eFigure 2. Sensitivity analysis of modified ozone-related mortality risk estimates (95% CI) by temperature under different temperature control methods using 8 degree of freedom (df) per year for time trend (A for European cities and B for U.S. cities) and 10 df per year for time trend (C for European cities and D for U.S. cities). Temperature was categorized into low (<25th percentile), medium (25th-75th percentile), and high (>75th percentile) levels. Without sTemp: no adjustment for nonlinear temperature effects; sTemp: DLNM, sTemp_heat+sTtemp_cold, sTemp_heat, and sTemp_cold: adjustment for non-linear temperature effects by using the distributed lag nonlinear model, both heat and cold effects, only heat effect, and only cold effect, respectively; MDA8: daily maximum 8-h average.



eFigure 3. Sensitivity analysis of modified ozone-related mortality risk estimates (95% CI) by temperature under different temperature control methods using different cut-offs for temperature categories in European cities (A) and U.S. cities (B). Temperature was categorized into low, medium, and high levels based on the cut-offs of 20th/80th, 15th/85th, and 10th/90th percentiles. Without sTemp: no adjustment for nonlinear temperature effects; sTemp: DLNM, sTemp_heat+sTtemp_cold, sTemp_heat, and sTemp_cold: adjustment for non-linear temperature effects by using the distributed lag nonlinear model, both heat and cold effects, only heat effect, and only cold effect, respectively; MDA8: daily maximum 8-h average.



eFigure 4. Sensitivity analysis of modified ozone-related mortality risk estimates (95% CI) by temperature under different temperature control methods using an alternative temperature stratification method by fitting ozone within temperature strata in European cities (A) and U.S. cities (B). Temperature was categorized into low, medium, and high levels based on the cut-offs of $20^{th}/80^{th}$, $15^{th}/85^{th}$, and $10^{th}/90^{th}$ percentiles. Without sTemp: no adjustment for nonlinear temperature effects; sTemp: DLNM, sTemp_heat+sTtemp_cold, sTemp_heat, and sTemp_cold: adjustment for non-linear temperature effects by using the distributed lag nonlinear model, both heat and cold effects, only heat effect, and only cold effect, respectively; MDA8: daily maximum 8-h average.