

92 **Table S1. Characteristics of the study population across New England for the years**
 93 **2000-2008**

Characteristic	N	%
Total population	2740308	100
Deaths	836853	30.5
Sex		
Male	1158052	42.3
Female	1582256	57.7
Race		
White	2576263	94.0
Black	83444	3.1
Asian	22005	0.8
Hispanic	19575	0.7
Other	39021	1.4
Age		
65-69	611977	22.3
70-74	521568	19
75-79	514346	18.8
80-84	476469	17.4
85-89	353639	12.9
>=90	262309	9.6

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95 **Table S2. Descriptive Statistics for temperature and temperature variability in**
 96 **summer and winter across New England, 2000-2008**
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	Temperature (°C)	Mean	Median	SD	Min	Max	Range	IQR	Q1	Q3
Overall	Summer mean	16.39	16.34	1.16	1.75	33.34	31.59	1.60	15.57	17.17
	Winter mean	2.35	2.68	2.88	-7.47	12.20	19.67	4.03	0.38	4.41
	Summer SD	2.46	2.45	0.33	0.00	4.50	4.50	0.44	2.23	2.67
	Winter SD	3.55	3.48	0.64	0.00	7.56	7.56	0.85	3.10	3.95
Spatial	Summer mean	16.49	16.48	0.99	13.37	19.19	5.82	1.32	15.80	17.11
	Winter mean	2.58	2.95	2.24	-3.98	8.22	12.19	3.40	0.96	4.36
	Summer SD	2.46	2.46	0.14	0.85	3.01	2.16	0.14	2.39	2.53
	Winter SD	3.41	3.29	0.46	1.50	5.06	3.56	0.63	3.09	3.72
Temporal	Summer mean	0.01	0.00	0.59	-6.21	15.61	21.83	0.88	-0.44	0.44
	Winter mean	-0.01	-0.06	1.45	-5.90	4.96	10.85	2.03	-1.03	1.00
	Summer SD	0.00	0.01	0.26	-0.85	2.86	3.71	0.37	-0.19	0.18
	Winter SD	0.00	0.07	0.50	-1.71	3.91	5.62	0.67	-0.31	0.36

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100 **Table S3. Correlation coefficients (r) of the spatial and temporal variations for mean**
 101 **temperature and temperature variability**
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	Summer mean	Winter mean	Summer SD	Winter SD	Summer mean ^s	Winter mean ^s	Summer SD ^s	Winter SD ^s	Summer mean ^t	Winter mean ^t	Summer SD ^t	Winter SD ^t
Summer mean	1.00	0.56	0.43	-0.37	0.86	0.69	0.56	-0.56	0.51	-0.04	0.19	0.01
Winter mean	0.56	1.00	0.12	-0.82	0.68	0.84	0.18	-0.80	-0.05	0.54	0.03	-0.37
Summer SD	0.43	0.12	1.00	-0.02	0.31	0.10	0.48	-0.02	0.32	0.06	0.88	-0.01
Winter SD	-0.37	-0.82	-0.02	1.00	-0.44	-0.64	-0.03	0.67	0.01	-0.51	-0.00	0.74
Summer mean^s	0.86	0.68	0.31	-0.44	1.00	0.80	0.65	-0.65	-0.01	0.00	-0.00	0.00
Winter mean^s	0.69	0.84	0.10	-0.64	0.80	1.00	0.22	-0.95	-0.01	-0.00	-0.00	0.00
Summer SD^s	0.56	0.18	0.48	-0.03	0.65	0.22	1.00	-0.05	-0.00	0.00	0.00	0.00
Winter SD^s	-0.56	-0.80	-0.02	0.67	-0.65	-0.95	-0.05	1.00	0.00	0.00	0.00	-0.01
Summer mean^t	0.51	-0.05	0.32	0.01	-0.01	-0.01	-0.00	0.00	1.00	-0.08	0.36	0.02
Winter mean^t	-0.04	0.54	0.06	-0.51	0.00	-0.00	0.00	0.00	-0.08	1.00	0.07	-0.69
Summer SD^t	0.19	0.03	0.88	-0.00	-0.00	-0.00	0.00	0.00	0.36	0.07	1.00	-0.01
Winter SD^t	0.01	-0.37	-0.01	0.74	0.00	0.00	0.00	-0.01	0.02	-0.69	-0.01	1.00

103 ^s stands for spatial variation;
 104 ^t stands for temporal variation.

105 **Table S4. Percent increase in mortality (95% CI) for each 1 °C increase for both**
 106 **seasonal mean temperature and temperature SD**

	Variable	Percent increase	95% CI	<i>p</i>-value	Unit
Unadjusted by SDs	Summer mean	1.7	(1.3,2.1)	<.0001	1 °C
	Winter mean	-1.6	(-1.7,-1.4)	<.0001	1 °C
Unadjusted by means	Summer SD	2.2	(1.2,3.2)	<.0001	1 °C
	Winter SD	5.6	(5.0,6.2)	<.0001	1 °C
Adjusted by SDs	Summer mean	1.0	(0.6,1.5)	<.0001	1 °C
	Winter mean	-0.6	(-0.9,-0.3)	<.0001	1 °C
Adjusted by means	Summer SD	1.3	(0.2,2.4)	<.0001	1 °C
	Winter SD	4.1	(3.0,5.2)	<.0001	1 °C

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