

Supplementary Materials:

Regional assessment of temperature-related mortality in Finland

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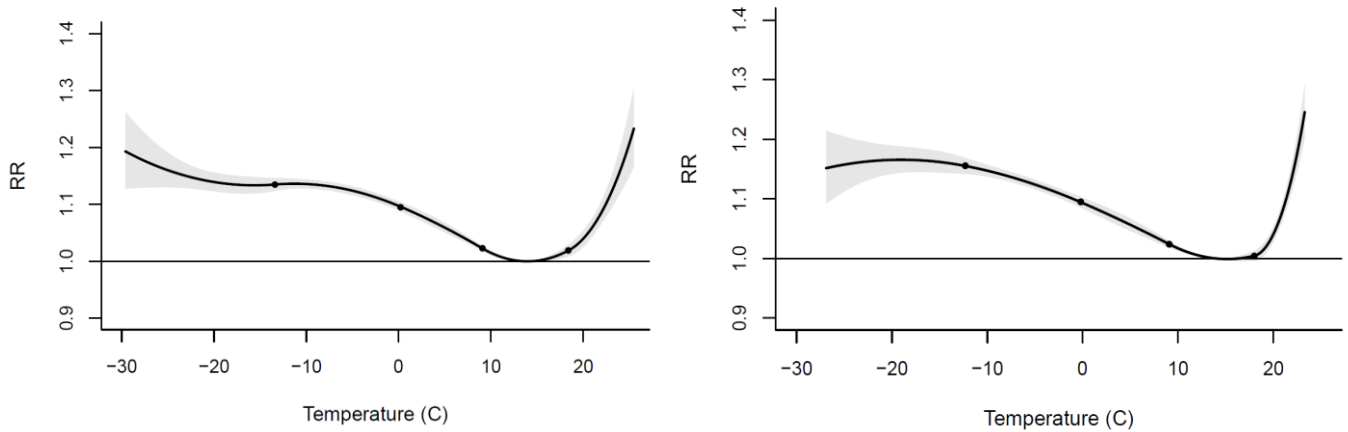
Table S1. Characteristics of the hospital districts in 2000–2014: daily number of deaths, population, share of elderly, morbidity index and spatially averaged daily temperature in the hospital districts.

Figure S1. Pooled temperature–mortality relationships with different model parameters.

Table S1. Characteristics of the hospital districts in 2000–2014: daily number of deaths, population, share of elderly (75 years and older), morbidity index (2001–2014) and spatially averaged daily temperature in the hospital districts

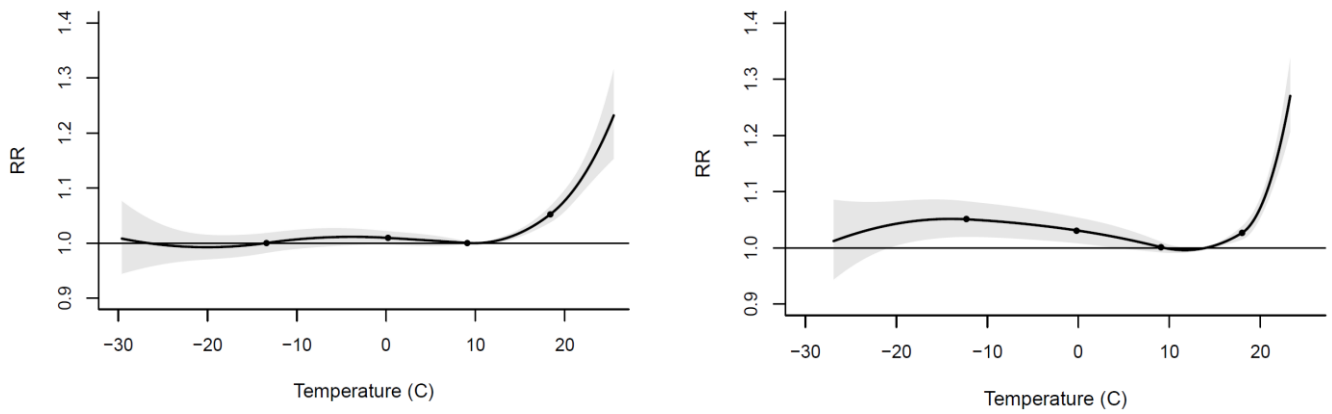
Hospital district	Daily deaths, all			Population, all			Share of elderly, 75+ years [%]			Morbidity index			Daily mean T [°C]		
	Median	Min	Max	Median	Min	Max	Median	Min	Max	Mean	Min	Max	Median	Min	Max
HD1, Helsinki-Uusimaa	30	11	57	1471550	1375772	1599390	5.6	5.0	6.4	83.0	76.7	88.0	5.7	-24.5	25.4
HD3, Varsinais-Suomi	12	2	27	461928	449316	449316	8.5	7.3	9.9	108.6	94.9	116.1	5.7	-25.2	25.7
HD4, Satakunta	7	0	20	227590	223983	234228	9.4	7.7	10.4	108.2	103.4	112.3	5.3	-26.6	25.5
HD5, Kanta-Häme	5	0	16	170703	165190	175481	8.9	7.7	9.7	102.4	100.2	105.0	5.1	-27.3	25.7
HD6, Pirkanmaa	12	1	27	472015	443763	500265	7.9	6.8	8.7	101.8	98.2	104.6	4.7	-28.9	25.6
HD7, Päijät-Häme	6	0	17	210934	208837	213542	8.4	6.8	9.7	116.2	107.6	123.1	4.9	-28.0	25.5
HD8, Kymenlaakso	5	0	16	176675	172908	181119	9.4	7.8	10.4	119.1	111.8	125.7	5.2	-28.1	26.2
HD9, Etelä-Karjala	4	0	13	134169	131764	136524	9.5	7.7	10.8	113.1	105.2	117.4	4.6	-30.9	26.9
HD10, Etelä-Savo	3	0	13	108212	103873	113157	10.1	8.4	11.0	128.3	123.3	130.7	4.4	-28.8	26.4
HD11, Itä-Savo	1	0	8	47083	44051	50110	10.9	9.1	11.4	126.3	122.6	130.0	4.2	-30.7	26.2
HD12, Pohjois-Karjala	5	0	16	171326	168896	177235	9.0	7.3	9.9	139.2	129.5	147.4	3.2	-34.9	26.9
HD13, Pohjois-Savo	7	0	18	249184	247943	255451	9.0	7.1	9.9	141.1	137.4	145.5	3.6	-30.8	27.8
HD14, Keski-Suomi	7	0	18	270457	265131	275360	8.1	6.6	9.2	111.7	106.6	121.9	4.0	-29.7	26.6
HD15, Etelä-Pohjanmaa	8	0	21	198832	198242	201999	9.6	8.0	10.3	115.4	111.2	118.2	4.2	-28.8	24.7
HD16, Vaasa	4	0	14	162864	161112	169652	9.2	8.2	9.7	93.9	87.2	97.4	4.7	-27.7	24.0
HD17, Keski-Pohjanmaa	2	0	9	74703	74180	75494	8.3	6.8	9.2	112.7	105.1	116.9	3.7	-32.4	24.8
HD18, Pohjois-Pohjanmaa	8	1	25	388683	369835	408536	6.4	5.2	7.4	121.7	110.9	127.6	2.4	-33.2	24.5
HD19, Kainuu	2	0	11	80477	76119	86940	9.2	7.1	9.8	134.2	131.4	135.9	2.2	-32.2	25.9
HD20, Länsi-Pohja	2	0	9	66042	63603	69240	8.5	6.6	9.3	131.2	116.9	141.6	2.1	-33.4	24.6
HD21, Lappi	3	0	13	118620	118145	125105	7.7	5.6	9.3	119.3	115.2	125.4	0.5	-31.6	22.5
HD22, Ahvenanmaa	1	0	6	27038	25706	25706	8.3	8.3	9.7	75.6	65.7	83.1	6.2	-22.3	24.1

Figure S1. Pooled mortality-temperature relationships with different model parameters.



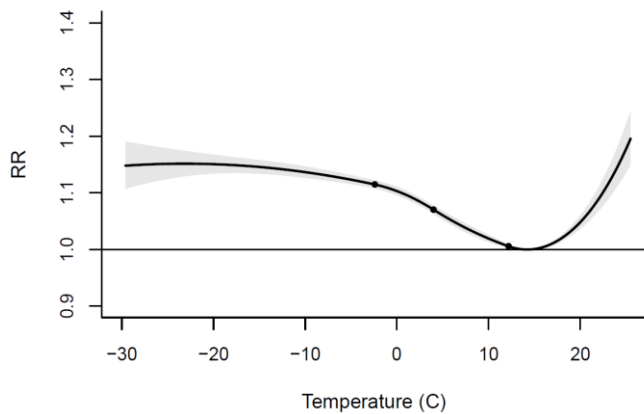
Exposure: Daily mean temperature (left), 5 day moving temperature average (right)

No confounding factors. Shaded areas represent 95% confidence intervals.



Confounding factors: day of the week and seasonal variation and long-term trend included;

Exposure: Daily mean temperature (left), 5 day moving temperature average (right)



Exposure: Daily mean temperature, model with 3 internal knots for temperature. No confounding factors.