Supplementary Information

Title:

Effects of temperature fluctuations on spatial-temporal transmission of hand, foot, and mouth disease

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Table S1 Quantified posterior means and RR of coefficients in BSTHM of Beijing.

Table S2 Quantified posterior means and RR of coefficients in BSTHM of Tianjin.

Table S3 Quantified posterior means and RR of coefficients in BSTHM of Hebei province.

Table S1 Quantified posterior means and RR of coefficients in BSTHM of Beijing.

Variables	Posterior mean (95% CI) (%)	RR (95% CI)
SD of maximum temperature(°C)	33.06** (5.74,60.77)	1.39 (1.06,1.84)
SD of minimum temperature(°C)	-1.59 (-23.22,21.42)	0.98 (0.79,1.24)
SD of average temperature(°C)	-19.30 (-59.66,20.35)	0.82 (0.55,1.23)
Average temperature (°C)	9.31** (6.87,12.01)	1.10 (1.07,1.13)
Relative humidity (%)	3.83** (2.26,5.79)	1.04 (1.02,1.06)
Wind speed (m/s)	40.70** (10.52,70.18)	1.50 (1.11,2.02)
Sun hours (h)	0.54** (0.09,1.04)	1.005 (1.00,1.01)
Precipitation (mm)	-0.07 (-0.28,0.14)	0.999 (0.997,1.00)

Note: 95% CI indicates confidence interval with a confidence level of 0.95,

**statistical significance level: 0.01.

Table S2 Quantified posterior means and RR of coefficients in BSTHM of Tianjin.

Variables	Posterior mean (95% CI) (%)	RR (95% CI)
SD of maximum temperature(°C)	-10.09 (-69.92,53.49)	0.90 (0.50,1.71)
SD of minimum temperature(°C)	-21.09 (-75.79,31.60)	0.81 (0.47,1.37)
SD of average temperature(°C)	47.59 (-52.18,142.00)	1.61 (0.59,4.14)
Average temperature (°C)	11.21** (8.53,13.99)	1.12 (1.09,1.15)
Relative humidity (%)	0.76 (-1.74,3.03)	1.01 (0.92,1.03)
Wind speed (m/s)	27.97 (-8.95,65.05)	1.32 (0.91,1.92)
Sun hours (h)	0.07 (-0.49,0.59)	1.00 (0.99,1.01)
Precipitation (mm)	0.62** (0.29,0.95)	1.006 (1.00,1.01)

Note: 95% CI indicates confidence interval with a confidence level of 0.95,

**statistical significance level: 0.01.

Table S3 Quantified posterior means and RR of coefficients in BSTHM of Hebei province.

Variables	Posterior mean (95% CI) (%)	RR (95% CI)
SD of maximum temperature(°C)	-6.45 (-19.78,5.94)	0.94 (0.82,1.06)
SD of minimum temperature(°C)	-8.92 (-22.80,3.67)	0.91 (0.80,1.04)
SD of average temperature(°C)	1.85 (-16.90,22.53)	1.02 (0.84,1.25)
Average temperature (°C)	19.95** (17.72,22.33)	1.22 (1.19,1.25)
Relative humidity (%)	4.25** (3.71,5.04)	1.04 (1.03,1.05)
Wind speed (m/s)	-26.27** (-38.23,-14.29)	0.77 (0.68,0.87)
Sun hours (h)	0.02 (-0.13,0.16)	1.00 (0.999,1.002)
Precipitation (mm)	-0.19** (-0.27,-0.11)	0.998 (0.997,1.00)

Note: 95% CI indicates confidence interval with a confidence level of 0.95,

**statistical significance level: 0.01.