



**Table S1.** Descriptive statistics of firefighter cohorts across geographical locations.

Characteristics	M-A Cohort	M-W Cohort	S-W Cohort	S-E Cohort	M-A Cohort	M-W Cohort
	Male	Male	Male	Male	Female	Female
N	858	3310	558	337	102	172
Age (years)	40.5 ± 9.0	42.5 ± 9.1 <sup>a</sup>	42.9 ± 8.9 <sup>a</sup>	37.8 ± 10.2 <sup>abc</sup>	39.1 ± 8.7	40.0 ± 8.9
White <i>n</i> (%)	615 (72)	2965 (91) <sup>a</sup>	445 (83) <sup>ab</sup>	n/a	80 (78)	151 (90) <sup>a</sup>
African American/Black <i>n</i> (%)	127 (15)	210 (6) <sup>a</sup>	11 (2) <sup>ab</sup>	n/a	14 (14)	11 (7) <sup>a</sup>
Other <i>n</i> (%)	116 (14)	92 (3) <sup>a</sup>	80 (15) <sup>ab</sup>	n/a	8 (8)	5 (3) <sup>a</sup>
Height (m)	1.8 ± 0.1	1.8 ± 0.1	1.8 ± 0.1 <sup>ab</sup>	1.8 ± 0.1 <sup>ab</sup>	1.7 ± 0.1	1.7 ± 0.1
Body Weight (kg)	92.4 ± 14.3	97.7 ± 17.2 <sup>a</sup>	93.1 ± 15.1 <sup>b</sup>	94.2 ± 16.3 <sup>b</sup>	73.0 ± 12.3	80.3 ± 18.3 <sup>a</sup>
Body Mass Index (kg·m <sup>-2</sup> )	28.9 ± 3.9	30.3 ± 4.7 <sup>a</sup>	28.7 ± 4.0 <sup>b</sup>	28.9 ± 4.4 <sup>b</sup>	26.1 ± 4.0	28.7 ± 5.7 <sup>a</sup>
Normal <i>n</i> (%) <sup>1</sup>	118 (14)	336 (10) <sup>a</sup>	87 (16) <sup>b</sup>	57 (17) <sup>b</sup>	43 (43)	50 (29) <sup>a</sup>
Overweight <i>n</i> (%) <sup>2</sup>	430 (51)	1385 (42) <sup>a</sup>	282 (53) <sup>b</sup>	168 (50) <sup>b</sup>	42 (42)	59 (35) <sup>a</sup>
Obese <i>n</i> (%) <sup>3</sup>	293 (35)	1575 (48) <sup>a</sup>	166 (31) <sup>b</sup>	112 (33) <sup>b</sup>	14 (14)	61 (36) <sup>a</sup>
Systolic Blood Pressure (mmHg)	120.4 ± 10.6	126.2 ± 10.0 <sup>a</sup>	121.8 ± 11.8 <sup>ab</sup>	121.7 ± 7.5 <sup>ab</sup>	114.2 ± 12.6	119.7 ± 10.6 <sup>a</sup>
Diastolic Blood Pressure (mmHg)	77.3 ± 7.9	82.9 ± 5.9 <sup>a</sup>	78.8 ± 7.2 <sup>ab</sup>	77.2 ± 5.3 <sup>bc</sup>	72.3 ± 7.7	78.5 ± 7.2 <sup>a</sup>
Hypertension <i>n</i> (%) <sup>4</sup>	437 (51)	2541 (78) <sup>a</sup>	322 (60) <sup>ab</sup>	n/a	25 (25)	70 (42) <sup>a</sup>
Antihypertensive Medication <i>n</i> (%)	135 (16)	596 (18)	73 (14) <sup>b</sup>	n/a	6 (6)	25 (15) <sup>a</sup>

Data presented as *n* (%) or mean ± standard deviation. <sup>1</sup> Normal BMI defined as <25 kg·m<sup>-2</sup>; <sup>2</sup> Overweight BMI defined as 25–29.9 kg·m<sup>-2</sup>; <sup>3</sup> Obese BMI defined as ≥30 kg·m<sup>-2</sup>; <sup>4</sup> Hypertension defined as systolic blood pressure ≥130 mmHg, or diastolic blood pressure ≥80 mmHg, or taking antihypertensive medication; M-A, Mid-Atlantic; M-W, Midwest; S-W, Southwest; S-E, Southeast. For males, ANOVA models with *post-hoc* comparisons and chi-squared tests were conducted to test for statistical differences between the cohorts. For females, t-tests and chi-squared tests were conducted to test for statistical differences between the cohorts. <sup>a</sup> Indicates a statistical difference with the M-A Cohort., <sup>b</sup> indicates a statistical difference with the M-W Cohort, <sup>c</sup> indicates a statistical difference with the S-W Cohort. The level of significance for all analyses was considered at *p* < 0.05.