

Estimated effect of yearly mean of EC at residence on survival after MI in subgroups calculated per 0.24 $\mu\text{g}/\text{m}^3$ (the interquartile range).

Subgroup	Description	N	Up to 2 nd year of follow up		After 2 nd year of follow up	
			HR (95% CI)	P*	HR (95% CI)	P
All		3895	1.02 (0.93, 1.11)		1.15 (1.03, 1.29)	
Age [years]	25+ thru 65	1445	0.89 (0.70, 1.12)		1.21 (0.95, 1.55)	
	65+ thru 105	2450	1.02 (0.93, 1.12)	0.275	1.09 (0.96, 1.24)	0.452
Sex	male	2286	1.01 (0.90, 1.14)		1.17 (1.00, 1.37)	
	female	1609	1.01 (0.89, 1.14)	0.941	1.09 (0.92, 1.29)	0.556
Married	No	1666	1.02 (0.91, 1.15)		1.12 (0.95, 1.33)	
	Yes	2229	0.98 (0.87, 1.12)	0.655	1.12 (0.95, 1.30)	0.957
Race	Not white	252	1.22 (0.80, 1.85)		0.94 (0.52, 1.73)	
	White	3523	1.00 (0.92, 1.10)	0.380	1.17 (1.04, 1.31)	0.504
MI order	recurrent	1140	0.91 (0.79, 1.04)		1.00 (0.82, 1.20)	
	initial	2755	1.08 (0.97, 1.21)	0.045	1.22 (1.06, 1.40)	0.095
MI Type	non-Q	2747	1.01 (0.92, 1.11)		1.10 (0.96, 1.26)	
	Q wave	1148	1.05 (0.86, 1.28)	0.746	1.23 (1.00, 1.53)	0.384
History of						
Diabetes	No	2752	0.99 (0.89, 1.11)		1.21 (1.05, 1.39)	
	Yes	1143	1.03 (0.90, 1.19)	0.651	1.02 (0.85, 1.24)	0.168
Angina	No	3046	0.96 (0.87, 1.06)		1.13 (0.99, 1.29)	
	Yes	849	1.23 (1.03, 1.46)	0.014	1.22 (0.99, 1.52)	0.550
Stroke	No	3519	1.01 (0.92, 1.11)		1.13 (1.00, 1.28)	
	Yes	376	1.01 (0.82, 1.25)	0.949	1.18 (0.89, 1.57)	0.786

* P value for test for homogeneity

Subgroup	Description	N	Up to 2 nd year of follow up	P*	After 2 nd year of follow up	P
			HR (95% CI)		HR (95% CI)	
Congestive heart failure	No	3218	1.07 (0.96, 1.19)		1.13 (0.99, 1.28)	
	Yes	677	0.88 (0.76, 1.02)	0.035	1.03 (0.80, 1.31)	0.498
Hypertension	No	1424	0.99 (0.86, 1.15)		1.23 (1.01, 1.50)	
	Yes	2471	1.01 (0.91, 1.12)	0.871	1.11 (0.96, 1.27)	0.392
Census block level SEP						
Median household income	below 50 T\$	2045	0.95 (0.84 , 1.08)		1.10 (0.94 , 1.30)	
	above 50 T\$	1850	1.01 (0.89 , 1.16)	0.485	1.10 (0.92 , 1.31)	0.973
Proportion of residents living below poverty line	above 6%	1947	0.98 (0.86 , 1.11)		1.09 (0.92 , 1.29)	
	below 6%	1948	1.04 (0.92 , 1.18)	0.469	1.18 (1.00 , 1.39)	0.512
Subgroup that has smoking and COPD data						
All		3169	1.02 (0.92, 1.13)		1.19 (1.03, 1.38)	
Current smoker	No	2438	1.01 (0.90, 1.12)		1.11 (0.95, 1.31)	
	Yes	731	1.00 (0.75, 1.31)	0.930	1.47 (1.03, 2.10)	0.161
COPD	No	2647	1.02 (0.91, 1.15)		1.15 (0.97, 1.36)	
	Yes	522	1.02 (0.83, 1.26)	0.995	1.46 (1.07, 2.00)	0.180

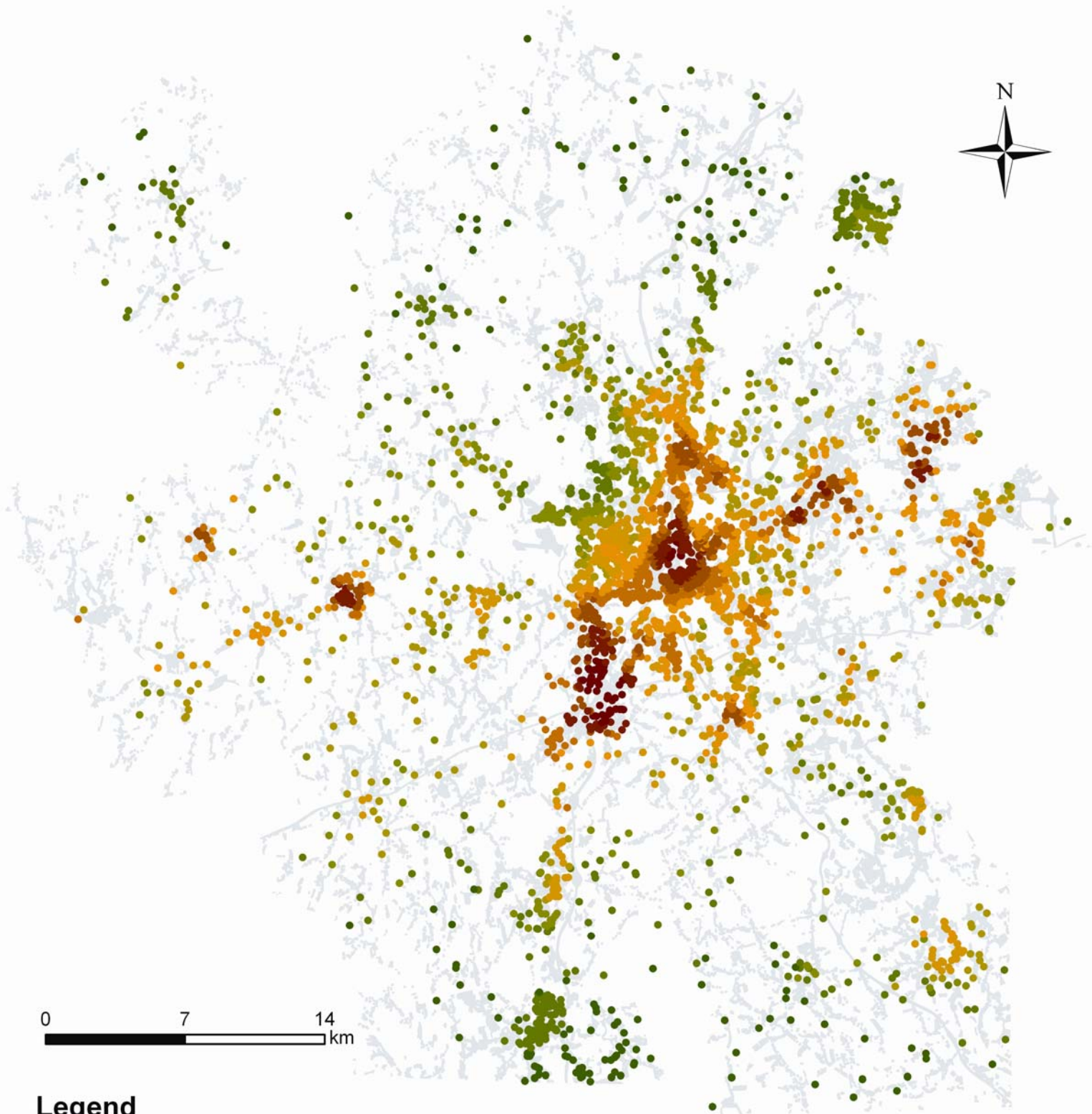
* P value for test for homogeneity

Legend for eFigure.

Subjects' places of residence* and estimated yearly average elemental carbon exposures for 2000 in the greater Worcester area (n = 3895).

* For anonymization locations were moved, using population density-based Gaussian blurring.¹

1. Cassa CA, Grannis SJ, Overhage JM, Mandl KD. A context-sensitive approach to anonymizing spatial surveillance data: impact on outbreak detection. *J Am Med Inform Assoc.* 2006;13:160–165.



Legend

Average EC in 2000 [ug/m3]

- 0.06 - 0.17
- 0.18 - 0.25
- 0.26 - 0.31
- 0.32 - 0.37
- 0.38 - 0.43

- 0.44 - 0.48
- 0.49 - 0.55
- 0.56 - 0.62
- 0.63 - 0.73
- 0.74 - 0.91

Residential and commercial areas and routes of transportation
Source: MassGIS Land Use datalayer

