

SUPPLEMENTAL MATERIAL

Supplemental Table 1: Hazard ratios (HRs) and 95 % confidence intervals (95% CI) for the multivariable and mediator adjusted association of risk of sudden cardiac death 1986-2012 with residential proximity to A1-A3 roads among Nurses' Health Study participants by active smoking status

Distance (m)	Never Smokers			Ever Smokers		
	Cases	Person-Years	HR (95%CI)*	Cases	Person-Years	HR (95%CI)*
0-49	33	153,559	1.22 (0.80-1.97)	67	186,407	1.56 (1.08-2.23)
50-199	57	282,979	1.22 (0.80-1.87)	89	352,552	1.17 (0.84-1.65)
200-499	60	329,767	1.25 (0.82-1.89)	105	412,495	1.23 (0.89-1.70)
500+	39	265,689	reference	58	310,025	reference
Linear (per 100m closer) §	189	1,031,994	1.06 (0.97-1.15)	319	1,261,479	1.07 (1.00-1.14)
p-for-interaction				0.88		

* Models adjusted for age, race, and calendar time, secondhand smoke exposure during childhood, at home, and at work, BMI, menopausal status and postmenopausal hormone use, the Alternative Healthy Eating Index, alcohol consumption, physical activity, family history of MI, aspirin, multivitamin, and vitamin E use, region of residence, and Census tract median home value and median income, incidence of diabetes or cancer, high cholesterol, high blood pressure, stroke, or coronary heart disease

§ Linear models for distances 0-499m, compared to addresses 500+m away

Supplemental Table 2: Hazard ratios (HRs) and 95 % confidence intervals (95% CI) for the multivariable and mediator adjusted associations of the risk of nonfatal myocardial infarction (MI) and fatal coronary heart disease (CHD) 1986-2010 with residential proximity to A1-A3 roads among Nurses' Health Study participants by active smoking status

Outcome	Distance (m)	Cases	Never Smokers		Ever Smokers		
			Person-Years	HR (95%CI)*	Cases	Person-Years	HR (95%CI)*
Nonfatal MI	0-49	108	141,168	1.06 (0.84-1.20)	162	171,856	1.10 (0.94-1.28)
	50-199	102	261,862	1.00 (0.84-1.20)	166	326,017	1.13 (0.99-1.29)
	200-499	89	304,673	0.94 (0.78-1.12)	150	381,281	1.08 (0.95-1.23)
	500+	92	241,918	reference	131	282,346	reference
	Linear (per 100m) §	911	949,621	1.01 (0.98-1.05)	1,762	1,161,499	1.02 (0.99-1.05)
	p-for-interaction					0.89	
Fatal CHD	0-49	47	244,065	1.21 (0.85-1.72)	145	174,848	1.37 (0.87-1.35)
	50-199	43	307,267	1.21 (0.89-1.65)	201	331,579	1.09 (0.87-1.36)
	200-499	42	264,344	1.37 (1.01-1.85)	200	386,787	0.96 (0.77-1.21)
	500+	28	142,672	reference	132	286,390	reference
	Linear (per 100m) §	379	958,349	1.03 (0.97-1.09)	678	1,179,603	1.07 (1.02-1.11)
	p-for-interaction					0.52	

* Models adjusted for age, race, calendar time, secondhand smoke exposure during childhood, at home, and at work, BMI, menopausal status and postmenopausal hormone use, the Alternative Healthy Eating Index, alcohol consumption, physical activity, family history of MI, aspirin, multivitamin, and vitamin E use, region of residence, and Census tract median home value and median income, and incidence of diabetes, cancer, high cholesterol, high blood pressure, or stroke

§ Linear models for distances 0-499m, compared to addresses 500+m away