



ADDITIONAL MATERIALS AVAILABLE ON THE HEI WEBSITE

Research Report 192, Part 2

The Multicenter Ozone Study in oldEr Subjects (MOSES): Part 2. Effects of Personal and Ambient Concentrations of Ozone and Other Pollutants on Cardiovascular and Pulmonary Function

Rich and Frampton et al.

Additional Materials 2. Supplementary Tables for Secondary Endpoints

These Additional Materials were not formatted or edited by HEI. This document was part of the HEI MOSES Review Panel's review process.

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Appendix I. Sensitivity Analysis – Models not including Relative Humidity - Aim 3: Outcome associated with each interquartile range (IQR) increase in ambient pollutant concentration, by lag hours

APPENDIX A.

Aim 2 Secondary Outcomes: Controlled ozone exposure effects on each secondary outcome, by tertile of PES O₃, PES NO₂, or ambient pollutant concentration.

Outcome	Pollutant (IQR)	N	Ozone exposure (ppb)	Difference	95% CI	Difference	95% CI	Difference	95% CI	Difference	95% CI	Type III Interaction p-value	
<i>Heart Rate Variability</i>													
Ln of RMSSD (5 min; ms)	PES O ₃ (0-71 hr)	661	120	0.022	-0.125	0.169	0.099	-0.067	0.264	0.106	-0.046	0.258	0.066
			70	0.023	-0.136	0.182	-0.097	-0.255	0.061	0.193	0.043	0.342	
			0	0	-	-	0	-	-	0	-	-	
	PES NO ₂ (0-71 hr)	661	120	0.047	-0.103	0.197	0.091	-0.072	0.254	0.102	-0.064	0.268	0.977
			70	0.036	-0.122	0.194	0.090	-0.065	0.245	0.047	-0.118	0.211	
			0	0	-	-	0	-	-	0	-	-	
	O ₃ (0-95 hr)	631	120	0.243	0.055	0.432	0.083	-0.083	0.249	-0.021	-0.183	0.141	0.188
			70	0.017	-0.145	0.180	0.101	-0.072	0.273	0.020	-0.148	0.188	
			0	0	-	-	0	-	-	0	-	-	
	PM _{2.5} (0-71 hr)	614	120	0.106	-0.061	0.272	0.031	-0.153	0.215	0.193	0.012	0.373	0.459
			70	0.131	-0.027	0.289	-0.010	-0.179	0.159	0.029	-0.155	0.214	
			0	0	-	-	0	-	-	0	-	-	
CO (0-11 hr)	614	120	0.170	-0.002	0.342	-0.090	-0.249	0.068	0.323	0.141	0.504	0.005	
		70	-0.041	-0.195	0.113	0.016	-0.155	0.187	0.208	0.038	0.378		
		0	0	-	-	0	-	-	0	-	-		
NO ₂ (0-11 hr)	591	120	-0.039	-0.215	0.138	-0.101	-0.274	0.072	0.367	0.190	0.543	0.002	
		70	-0.143	-0.306	0.020	-0.006	-0.184	0.172	0.211	0.036	0.386		
		0	0	-	-	0	-	-	0	-	-		
SO ₂ (0-95 hr)	436	120	0.106	-0.078	0.289	0.067	-0.137	0.270	0.113	-0.061	0.287	0.868	
		70	-0.044	-0.236	0.149	0.035	-0.150	0.220	0.086	-0.101	0.274		
		0	0	-	-	0	-	-	0	-	-		
Ln of SDNN (5 min; ms)	PES O ₃ (0-71 hr)	661	120	-0.229	-0.383	-0.074	0.030	-0.144	0.205	0.076	-0.084	0.236	0.069
			70	-0.156	-0.324	0.011	-0.036	-0.202	0.131	0.067	-0.090	0.224	
			0	0	-	-	0	-	-	0	-	-	
	PES NO ₂ (0-71 hr)	661	120	-0.185	-0.341	-0.029	0.019	-0.151	0.189	0.026	-0.147	0.199	0.149
			70	-0.212	-0.377	-0.048	0.070	-0.091	0.231	0.009	-0.162	0.179	
			0	0	-	-	0	-	-	0	-	-	
	O ₃ (0-95 hr)	631	120	-0.007	-0.205	0.191	-0.053	-0.227	0.122	-0.067	-0.237	0.104	0.448
			70	-0.171	-0.342	0.000	0.035	-0.146	0.217	-0.071	-0.248	0.106	
			0	0	-	-	0	-	-	0	-	-	
	PM _{2.5} (0-95 hr)	611	120	-0.139	-0.314	0.037	-0.091	-0.283	0.101	0.087	-0.104	0.277	0.029
			70	-0.004	-0.163	0.154	-0.076	-0.254	0.102	-0.176	-0.364	0.013	

			0	0	-	-	0	-	-	0	-	-	
	CO (0-71 hr)	617	120	0.090	-0.091	0.271	-0.230	-0.390	-0.069	0.127	-0.047	0.300	
			70	0.000	-0.165	0.164	-0.262	-0.426	-0.098	0.090	-0.094	0.275	0.018
			0	0	-	-	0	-	-	0	-	-	
	NO ₂ (0-71 hr)	594	120	0.150	-0.036	0.336	-0.261	-0.432	-0.089	0.026	-0.159	0.210	
			70	-0.163	-0.332	0.006	0.008	-0.166	0.182	-0.114	-0.304	0.076	0.001
			0	0	-	-	0	-	-	0	-	-	
	SO ₂ (0-23 hr)	436	120	-0.156	-0.358	0.047	0.073	-0.133	0.278	0.025	-0.188	0.238	
			70	0.079	-0.148	0.305	-0.181	-0.376	0.014	-0.090	-0.297	0.117	0.027
			0	0	-	-	0	-	-	0	-	-	
	PES O ₃ (0-71 hr)	661	120	0.14	-0.18	0.46	-0.11	-0.47	0.25	-0.15	-0.48	0.18	
			70	0.15	-0.19	0.50	-0.05	-0.39	0.29	-0.31	-0.63	0.01	0.376
			0	0	-	-	0	-	-	0	-	-	
	PES NO ₂ (0-71 hr)	661	120	-0.01	-0.33	0.31	-0.20	-0.54	0.15	0.06	-0.29	0.42	
			70	-0.10	-0.44	0.24	-0.26	-0.60	0.07	0.09	-0.26	0.44	0.701
			0	0	-	-	0	-	-	0	-	-	
	O ₃ (0-95 hr)	631	120	-0.34	-0.74	0.06	-0.18	-0.53	0.17	0.35	0.01	0.69	
			70	0.00	-0.34	0.35	0.00	-0.37	0.36	-0.28	-0.63	0.08	0.001
			0	0	-	-	0	-	-	0	-	-	
LF/HF Ratio	PM _{2.5} (0-95 hr)	611	120	-0.14	-0.50	0.23	0.32	-0.07	0.72	-0.04	-0.43	0.36	
			70	-0.37	-0.70	-0.04	0.18	-0.19	0.55	0.04	-0.35	0.43	0.164
			0	0	-	-	0	-	-	0	-	-	
	CO (0-71 hr)	617	120	0.09	-0.30	0.48	-0.16	-0.50	0.17	0.11	-0.26	0.47	
			70	-0.26	-0.59	0.08	-0.12	-0.47	0.23	0.07	-0.32	0.46	0.452
			0	0	-	-	0	-	-	0	-	-	
	NO ₂ (0-71 hr)	594	120	0.37	0.10	0.74	-0.27	-0.63	0.10	0.05	-0.33	0.44	
			70	0.09	-0.26	0.44	-0.64	-0.99	-0.28	0.23	-0.16	0.61	0.003
			0	0	-	-	0	-	-	0	-	-	
	SO ₂ (0-23 hr)	436	120	0.00	-0.43	0.43	-0.10	-0.57	0.38	0.01	-0.40	0.41	
			70	0.07	-0.38	0.52	-0.26	-0.69	0.18	-0.34	-0.78	0.10	0.670
			0	0	-	-	0	-	-	0	-	-	

APPENDIX B.

Aim 3 Secondary Outcomes: Change in pre-exposure biomarker concentrations associated with each interquartile range (IQR) increase in PES and ambient air pollutant concentration, by lag hours

Outcome	Pollutant	Lag Hours	IQR	N	Difference	95% Confidence Interval	P-value
<i>Heart Rate Variability (HRV)</i>							
Ln of RMSSD (5 min) (ms ²)	PES O ₃ (ppb)	0-71	4.1	224	-0.030	-0.116, 0.055	0.487
	PES NO ₂ (ppb)	0-71	9.3	224	0.030	-0.036, 0.096	0.364
	Ambient O ₃ (ppb)	0	15.2	206	-0.074	-0.191, 0.043	0.214
		0-2	15.2	195	-0.041	-0.162, 0.079	0.498
		0-11	16.1	211	-0.007	-0.118, 0.103	0.895
		0-23	13.7	213	-0.060	-0.167, 0.046	0.264
		0-47	11.3	214	-0.118	-0.221, -0.015	0.025
		0-71	11.0	213	-0.154	-0.265, -0.043	0.007
		0-95	10.3	214	-0.174	-0.290, -0.057	0.004
	Ambient PM _{2.5} (µg/m ³)	0	5.9	203	-0.016	-0.088, 0.055	0.657
		0-2	5.8	197	-0.017	-0.090, 0.056	0.646
		0-11	5.4	205	-0.025	-0.097, 0.048	0.501
		0-23	4.9	207	0.001	-0.079, 0.081	0.982
		0-47	4.6	207	0.046	-0.038, 0.129	0.280
		0-71	4.7	208	0.078	-0.013, 0.170	0.094
		0-95	4.3	207	0.094	0.004, 0.184	0.042
	Ambient CO (ppm)	0	0.126	206	0.044	-0.081, 0.168	0.491
		0-2	0.143	202	0.038	-0.095, 0.170	0.576
		0-11	0.144	208	-0.051	-0.143, 0.041	0.271
		0-23	0.129	209	0.008	-0.098, 0.114	0.886
0-47		0.109	209	0.090	-0.010, 0.191	0.077	
0-71		0.106	209	0.123	0.021, 0.225	0.019	
0-95		0.108	208	0.131	0.022, 0.241	0.019	
Ambient NO ₂ (ppb)	0	4.6	197	-0.035	-0.096, 0.025	0.252	
	0-2	5.5	193	-0.041	-0.123, 0.041	0.323	
	0-11	7.9	200	-0.079	-0.166, 0.007	0.073	
	0-23	6.1	202	-0.026	-0.117, 0.065	0.572	
	0-47	5.1	202	0.044	-0.041, 0.130	0.307	
	0-71	5.2	201	0.063	-0.029, 0.155	0.177	
	0-95	4.2	200	0.056	-0.021, 0.134	0.153	
Ambient SO ₂ (ppb)	0	0.8	145	0.025	-0.032, 0.082	0.384	
	0-2	0.9	144	0.007	-0.039, 0.053	0.760	
	0-11	0.8	146	0.022	-0.041, 0.086	0.489	
	0-23	0.9	148	0.005	-0.069, 0.080	0.886	
	0-47	0.9	149	0.000	-0.086, 0.086	0.999	
	0-71	0.9	149	0.006	-0.112, 0.125	0.915	
	0-95	0.9	148	0.019	-0.110, 0.148	0.774	

	631PES							
	O ₃ (ppb)	0-71	4.1	224	0.044	-0.038, 0.125	0.291	
	P611ES							
	NO ₂ (ppb)	0-71	9.3	224	0.000	-0.064, 0.063	0.996	
		0	15.2	206	-0.050	-0.158, 0.059	0.368	
		0-2	15.2	195	-0.039	-0.144, 0.065	0.458	
	Ambient	0-11	16.1	211	-0.047	-0.153, 0.059	0.383	
	O ₃ (ppb)	0-23	13.7	213	-0.081	-0.184, 0.021	0.118	
		0-47	11.3	214	-0.124	-0.223, -0.024	0.015	
		0-71	11.0	213	-0.158	-0.265, -0.051	0.004	
		0-95	10.3	214	-0.187	-0.299, -0.075	0.001	
		0	5.9	203	0.002	-0.061, 0.064	0.956	
		0-2	5.8	197	-0.005	-0.069, 0.058	0.865	
	Ambient	0-11	5.4	205	0.020	-0.043, 0.083	0.536	
	PM _{2.5} (µg/m ³)	0-23	4.9	207	0.036	-0.035, 0.107	0.320	
		0-47	4.6	207	0.049	-0.025, 0.123	0.192	
		0-71	4.7	208	0.068	-0.017, 0.153	0.118	
		0-95	4.3	207	0.086	0.003, 0.169	0.042	
Ln of SDNN (5 min) (ms ²)		0	0.126	206	0.062	-0.051, 0.175	0.280	
		0-2	0.143	202	0.065	-0.052, 0.182	0.273	
		Ambient	0-11	0.144	208	0.025	-0.06, 0.109	0.561
		CO (ppm)	0-23	0.129	209	0.061	-0.036, 0.159	0.214
			0-47	0.109	209	0.077	-0.015, 0.170	0.099
			0-71	0.106	209	0.109	0.015, 0.202	0.023
			0-95	0.108	208	0.118	0.018, 0.219	0.021
			0	4.6	197	0.012	-0.046, 0.069	0.691
			0-2	5.5	193	0.046	-0.029, 0.121	0.225
		Ambient	0-11	7.9	200	0.011	-0.072, 0.094	0.786
		NO ₂ (ppb)	0-23	6.1	202	0.051	-0.035, 0.136	0.243
			0-47	5.1	202	0.055	-0.025, 0.136	0.177
			0-71	5.2	201	0.076	-0.011, 0.163	0.086
		0-95	4.2	200	0.070	-0.003, 0.143	0.061	
		0	0.8	145	0.004	-0.055, 0.062	0.902	
		0-2	0.9	144	0.018	-0.027, 0.063	0.434	
	Ambient	0-11	0.8	146	0.012	-0.054, 0.078	0.717	
	SO ₂ (ppb)	0-23	0.9	148	0.017	-0.060, 0.095	0.659	
		0-47	0.9	149	-0.008	-0.098, 0.081	0.856	
		0-71	0.9	149	-0.024	-0.147, 0.099	0.698	
		0-95	0.9	148	-0.018	-0.152, 0.117	0.793	
LF/HF Ratio	PES							
	O ₃ (ppb)	0-71	4.1	224	0.10	-0.07, 0.27	0.238	
	PES							
	NO ₂ (ppb)	0-71	9.3	224	-0.10	-0.233, 0.03	0.238	

		0	15.2	206	0.19	-0.05, 0.41	0.125
		0-2	15.2	195	0.17	-0.07, 0.40	0.159
Ambient		0-11	16.1	211	0.08	-0.15, 0.30	0.502
O ₃		0-23	13.7	213	0.11	-0.11, 0.33	0.320
(ppb)		0-47	11.3	214	0.15	-0.06, 0.36	0.150
		0-71	11.0	213	0.18	-0.05, 0.41	0.116
		0-95	10.3	214	0.20	-0.04, 0.44	0.101
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		0	5.9	203	0.10	-0.04, 0.24	0.143
		0-2	5.8	197	0.09	-0.05, 0.23	0.215
Ambient		0-11	5.4	205	0.10	-0.05, 0.24	0.187
PM _{2.5}		0-23	4.9	207	0.08	-0.08, 0.24	0.322
(µg/m ³)		0-47	4.6	207	0.12	-0.05, 0.28	0.169
		0-71	4.7	208	0.12	-0.07, 0.30	0.215
		0-95	4.3	207	0.08	-0.10, 0.26	0.375
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		0	0.126	206	-0.06	-0.29, 0.18	0.646
		0-2	0.143	202	-0.04	-0.29, 0.21	0.725
Ambient		0-11	0.144	208	0.05	-0.13, 0.23	0.578
CO		0-23	0.129	209	0.02	-0.19, 0.22	0.887
(ppm)		0-47	0.109	209	-0.02	-0.22, 0.17	0.835
		0-71	0.106	209	-0.01	-0.20, 0.19	0.955
		0-95	0.108	208	-0.02	-0.23, 0.19	0.852
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		0	4.6	197	-0.05	-0.16, 0.06	0.380
		0-2	5.5	193	-0.09	-0.23, 0.06	0.257
Ambient		0-11	7.9	200	-0.02	-0.19, 0.14	0.776
NO ₂		0-23	6.1	202	-0.05	-0.22, 0.13	0.599
(ppb)		0-47	5.1	202	-0.05	-0.21, 0.12	0.560
		0-71	5.2	201	-0.07	-0.24, 0.11	0.447
		0-95	4.2	200	-0.07	-0.22, 0.08	0.344
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		0	0.8	145	0.00	-0.13, 0.13	0.988
		0-2	0.9	144	0.01	-0.09, 0.11	0.860
Ambient		0-11	0.8	146	0.02	-0.12, 0.16	0.777
SO ₂		0-23	0.9	148	0.01	-0.15, 0.18	0.887
(ppb)		0-47	0.9	149	-0.08	-0.27, 0.12	0.427
		0-71	0.9	149	-0.09	-0.35, 0.18	0.522
		0-95	0.9	148	-0.13	-0.42, 0.16	0.371

Systemic Inflammation

	PES						
	O ₃	0-71	4.1				
	(ppb)			224	-0.080	-0.212, 0.052	0.233
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	PES						
	NO ₂	0-71	9.3				
	(ppb)			224	-0.081	-0.184, 0.023	0.127
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		0	15.2	206	0.002	-0.175, 0.179	0.982
		0-2	15.2	195	0.052	-0.134, 0.237	0.581
Ln of IL-6	Ambient	0-11	16.1	211	0.123	-0.051, 0.297	0.165
(pg/mL)	O ₃	0-23	13.7	213	0.094	-0.078, 0.266	0.281
	(ppb)	0-47	11.3	214	0.106	-0.061, 0.273	0.213
		0-71	11.0	213	0.092	-0.088, 0.272	0.314
		0-95	10.3	214	0.062	-0.121, 0.246	0.501
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	Ambient	0	5.9	203	-0.056	-0.166, 0.053	0.310
	PM _{2.5}	0-2	5.8	197	-0.059	-0.173, 0.055	0.308

Ln of p-selectin (ng/mL)	(μg/m ³)	0-11	5.4	205	-0.035	-0.149, 0.078	0.540
		0-23	4.9	207	0.004	-0.124, 0.132	0.949
		0-47	4.6	207	0.028	-0.106, 0.163	0.678
		0-71	4.7	208	0.059	-0.091, 0.208	0.440
		0-95	4.3	207	0.103	-0.042, 0.248	0.163
	Ambient CO (ppm)	0	0.126	206	0.001	-0.184, 0.186	0.991
		0-2	0.143	202	-0.044	-0.245, 0.157	0.665
		0-11	0.144	208	-0.068	-0.211, 0.075	0.348
		0-23	0.129	209	-0.043	-0.206, 0.12	0.605
		0-47	0.109	209	0.009	-0.148, 0.165	0.913
		0-71	0.106	209	0.040	-0.123, 0.203	0.627
	Ambient NO ₂ (ppb)	0-95	0.108	208	0.104	-0.067, 0.276	0.232
		0	4.6	198	-0.015	-0.104, 0.074	0.736
		0-2	5.5	194	-0.036	-0.157, 0.084	0.552
		0-11	7.9	201	-0.065	-0.198, 0.068	0.333
		0-23	6.1	203	-0.001	-0.136, 0.134	0.989
		0-47	5.1	203	0.042	-0.086, 0.17	0.517
	Ambient SO ₂ (ppb)	0-71	5.2	202	0.104	-0.036, 0.244	0.144
		0-95	4.2	201	0.128	0.011, 0.246	0.033
		0	0.8	144	-0.009	-0.111, 0.093	0.864
0-2		0.9	143	-0.041	-0.121, 0.039	0.314	
0-11		0.8	145	-0.015	-0.128, 0.097	0.787	
0-23		0.9	147	-0.014	-0.146, 0.118	0.833	
PES O ₃ (ppb)	0-47	0.9	148	0.038	-0.115, 0.192	0.620	
	0-71	0.9	148	0.067	-0.145, 0.279	0.531	
	0-95	0.9	147	0.129	-0.095, 0.353	0.255	
	0-71	4.1	224	-0.039	-0.126, 0.048	0.380	
	PES NO ₂ (ppb)	0-71	9.3	224	0.015	-0.053, 0.084	0.662
	Ambient O ₃ (ppb)	0	15.2	206	-0.171	-0.295, -0.047	0.007
0-2		15.2	195	-0.123	-0.252, 0.005	0.059	
0-11		16.1	211	-0.036	-0.155, 0.083	0.549	
0-23		13.7	213	-0.063	-0.180, 0.053	0.284	
0-47		11.3	214	-0.031	-0.144, 0.081	0.580	
0-71		11.0	213	-0.054	-0.174, 0.066	0.376	
Ambient PM _{2.5} (μg/m ³)	0-95	10.3	214	-0.021	-0.148, 0.106	0.742	
	0	5.9	203	0.043	-0.035, 0.121	0.273	
	0-2	5.8	197	0.016	-0.063, 0.095	0.695	
	0-11	5.4	205	-0.030	-0.107, 0.047	0.439	
	0-23	4.9	207	-0.028	-0.115, 0.059	0.532	
	0-47	4.6	207	-0.014	-0.105, 0.078	0.769	
Ambient CO (ppm)	0-71	4.7	208	-0.014	-0.115, 0.087	0.786	
	0-95	4.3	207	-0.016	-0.115, 0.082	0.746	
	0	0.126	206	0.048	-0.083, 0.180	0.466	
	0-2	0.143	202	-0.015	-0.152, 0.123	0.834	
	0-11	0.144	208	-0.035	-0.132, 0.062	0.476	
	0-23	0.129	209	-0.043	-0.153, 0.067	0.442	
	0-47	0.109	209	-0.038	-0.143, 0.066	0.471	

		0-71	0.106	209	-0.004	-0.112, 0.103	0.935
		0-95	0.108	208	-0.004	-0.122, 0.114	0.948
		0	4.6	198	0.013	-0.052, 0.078	0.695
		0-2	5.5	194	-0.012	-0.098, 0.073	0.776
	Ambient	0-11	7.9	201	-0.075	-0.167, 0.017	0.111
	NO ₂	0-23	6.1	203	-0.079	-0.172, 0.014	0.095
	(ppb)	0-47	5.1	203	-0.057	-0.145, 0.031	0.199
		0-71	5.2	202	-0.031	-0.127, 0.065	0.524
		0-95	4.2	201	-0.027	-0.109, 0.054	0.509
		0	0.8	144	0.007	-0.065, 0.079	0.845
		0-2	0.9	143	-0.005	-0.061, 0.052	0.874
	Ambient	0-11	0.8	145	-0.072	-0.148, 0.005	0.065
	SO ₂	0-23	0.9	147	-0.081	-0.173, 0.010	0.081
	(ppb)	0-47	0.9	148	-0.077	-0.183, 0.030	0.156
		0-71	0.9	148	-0.119	-0.265, 0.026	0.106
		0-95	0.9	147	-0.145	-0.298, 0.007	0.061

Prothrombotic

	PES						
	O ₃	0-71	4.1	224	-0.068	-0.162, 0.027	0.159
	(ppb)						
	PES						
	NO ₂	0-71	9.3	224	0.100	0.025, 0.176	0.009
	(ppb)						
		0	15.2	206	0.040	-0.100, 0.181	0.569
		0-2	15.2	195	0.066	-0.071, 0.204	0.341
	Ambient	0-11	16.1	211	-0.039	-0.176, 0.099	0.578
	O ₃	0-23	13.7	213	-0.043	-0.177, 0.090	0.524
	(ppb)	0-47	11.3	214	-0.027	-0.155, 0.102	0.681
		0-71	11.0	213	-0.026	-0.163, 0.110	0.702
		0-95	10.3	214	0.000	-0.141, 0.140	0.997
		0	5.9	203	0.066	-0.017, 0.149	0.120
		0-2	5.8	197	0.048	-0.040, 0.135	0.284
	Ambient	0-11	5.4	205	0.009	-0.079, 0.097	0.844
	PM _{2.5}	0-23	4.9	207	-0.025	-0.123, 0.073	0.611
	(µg/m ³)	0-47	4.6	207	-0.078	-0.180, 0.023	0.130
		0-71	4.7	208	-0.101	-0.213, 0.011	0.077
		0-95	4.3	207	-0.115	-0.223, -0.007	0.036
		0	0.126	206	-0.081	-0.220, 0.058	0.250
		0-2	0.143	202	-0.101	-0.241, 0.039	0.157
	Ambient	0-11	0.144	208	-0.021	-0.131, 0.089	0.710
	CO	0-23	0.129	209	-0.067	-0.192, 0.058	0.291
	(ppm)	0-47	0.109	209	-0.112	-0.229, 0.005	0.060
		0-71	0.106	209	-0.135	-0.255, -0.015	0.027
		0-95	0.108	208	-0.164	-0.292, -0.036	0.012
		0	4.6	198	-0.033	-0.103, 0.037	0.348
		0-2	5.5	194	-0.049	-0.137, 0.039	0.268
	Ambient	0-11	7.9	201	0.028	-0.075, 0.131	0.589
	NO ₂	0-23	6.1	203	0.017	-0.086, 0.120	0.740
	(ppb)	0-47	5.1	203	-0.032	-0.128, 0.064	0.512
		0-71	5.2	202	-0.038	-0.142, 0.066	0.468
		0-95	4.2	201	-0.050	-0.138, 0.038	0.264

Ln of
Fibrinogen
(ng/mL)

	0	0.8	144	-0.026	-0.093, 0.041	0.445
	0-2	0.9	143	-0.019	-0.071, 0.034	0.480
Ambient	0-11	0.8	145	-0.040	-0.114, 0.034	0.285
SO ₂	0-23	0.9	147	-0.070	-0.157, 0.018	0.118
(ppb)	0-47	0.9	148	-0.069	-0.172, 0.035	0.190
	0-71	0.9	148	-0.113	-0.253, 0.028	0.116
	0-95	0.9	147	-0.109	-0.261, 0.043	0.158

APPENDIX C.

Aim 4 Secondary Outcomes: Difference in the Pre- to Post-exposure change associated with each interquartile range (IQR) increase in PES and ambient air pollutant concentrations, by lag hours

Outcome	Pollutant	Lag Hours	IQR	N	Difference	95% Confidence Interval	P-value
<i>Heart Rate Variability (HRV)</i>							
	PES						
	O ₃ (ppb)	0-71	4.1	661	0.003	-0.053, 0.059	0.914
	PES						
	NO ₂ (ppb)	0-71	9.3	661	-0.012	-0.057, 0.033	0.602
		0	15.2	608	0.015	-0.063, 0.092	0.708
		0-2	15.2	575	-0.019	-0.097, 0.059	0.632
	Ambient O ₃ (ppb)	0-11	16.1	622	-0.066	-0.142, 0.010	0.091
		0-23	13.7	628	-0.021	-0.096, 0.054	0.589
		0-47	11.3	631	0.031	-0.043, 0.104	0.412
		0-71	11.0	628	0.056	-0.024, 0.135	0.170
		0-95	10.3	631	0.093	0.010, 0.176	0.027
		0	5.9	599	-0.017	-0.065, 0.030	0.476
		0-2	5.8	582	-0.013	-0.053, 0.028	0.547
	Ambient PM _{2.5} (µg/m ³)	0-11	5.4	605	0.008	-0.041, 0.057	0.746
		0-23	4.9	611	-0.010	-0.065, 0.046	0.734
		0-47	4.6	611	-0.040	-0.098, 0.018	0.178
		0-71	4.7	614	-0.073	-0.137, -0.008	0.027
		0-95	4.3	611	-0.071	-0.132, -0.009	0.026
Ln of RMSSD (5 min; ms)		0	0.126	609	-0.002	-0.083, 0.079	0.956
		0-2	0.143	597	0.015	-0.069, 0.100	0.721
	Ambient CO (ppm)	0-11	0.144	614	0.072	0.010, 0.134	0.024
		0-23	0.129	617	0.035	-0.036, 0.107	0.331
		0-47	0.109	617	-0.035	-0.102, 0.033	0.315
		0-71	0.106	617	-0.065	-0.134, 0.003	0.063
		0-95	0.108	614	-0.059	-0.132, 0.014	0.113
		0	4.6	583	0.019	-0.020, 0.058	0.350
		0-2	5.5	571	0.040	-0.010, 0.091	0.118
	Ambient NO ₂ (ppb)	0-11	7.9	591	0.059	0.000, 0.117	0.048
		0-23	6.1	597	0.036	-0.024, 0.096	0.235
		0-47	5.1	597	-0.006	-0.062, 0.050	0.837
		0-71	5.2	594	-0.017	-0.078, 0.043	0.574
		0-95	4.2	591	-0.010	-0.061, 0.041	0.707
		0	0.8	428	0.019	-0.020, 0.058	0.347
	Ambient SO ₂ (ppb)	0-2	0.9	425	0.008	-0.021, 0.036	0.596
		0-11	0.8	431	-0.019	-0.062, 0.024	0.379
		0-23	0.9	436	-0.010	-0.061, 0.042	0.714
		0-47	0.9	439	-0.001	-0.061, 0.058	0.961

		0-71	0.9	439	-0.003	-0.085, 0.078	0.934
		0-95	0.9	436	-0.027	-0.115, 0.061	0.551
	PES						
	O ₃ (ppb)	0-71	4.1	661	-0.043	-0.102, 0.017	0.160
	PES						
	NO ₂ (ppb)	0-71	9.3	661	-0.003	-0.05, 0.045	0.915
		0	15.2	608	0.004	-0.077, 0.085	0.919
		0-2	15.2	575	0.002	-0.076, 0.081	0.952
	Ambient	0-11	16.1	622	-0.018	-0.097, 0.062	0.662
	O ₃ (ppb)	0-23	13.7	628	0.009	-0.069, 0.087	0.824
		0-47	11.3	631	0.053	-0.024, 0.130	0.174
		0-71	11.0	628	0.069	-0.014, 0.152	0.101
		0-95	10.3	631	0.097	0.010, 0.184	0.030
		0	5.9	599	-0.004	-0.051, 0.044	0.885
		0-2	5.8	582	0.004	-0.037, 0.046	0.840
	Ambient	0-11	5.4	605	0.000	-0.049, 0.049	0.998
	PM _{2.5} (µg/m ³)	0-23	4.9	611	-0.002	-0.058, 0.053	0.934
		0-47	4.6	611	0.001	-0.058, 0.059	0.978
		0-71	4.7	614	-0.012	-0.079, 0.054	0.713
		0-95	4.3	611	-0.015	-0.080, 0.049	0.642
		0	0.126	609	0.013	-0.072, 0.098	0.767
		0-2	0.143	597	0.018	-0.072, 0.107	0.697
	Ambient	0-11	0.144	614	0.033	-0.032, 0.097	0.320
	CO (ppm)	0-23	0.129	617	0.021	-0.053, 0.095	0.579
		0-47	0.109	617	-0.006	-0.077, 0.064	0.864
		0-71	0.106	617	-0.039	-0.111, 0.033	0.290
		0-95	0.108	614	-0.035	-0.112, 0.042	0.371
		0	4.6	583	-0.005	-0.047, 0.037	0.817
		0-2	5.5	571	-0.017	-0.072, 0.038	0.546
	Ambient	0-11	7.9	591	0.007	-0.054, 0.068	0.828
	NO ₂ (ppb)	0-23	6.1	597	-0.003	-0.066, 0.060	0.929
		0-47	5.1	597	0.000	-0.059, 0.059	0.994
		0-71	5.2	594	-0.018	-0.082, 0.046	0.583
		0-95	4.2	591	-0.013	-0.067, 0.041	0.631
		0	0.8	428	0.023	-0.022, 0.067	0.315
		0-2	0.9	425	-0.012	-0.045, 0.020	0.454
	Ambient	0-11	0.8	431	-0.026	-0.073, 0.022	0.289
	SO ₂ (ppb)	0-23	0.9	436	-0.050	-0.106, 0.006	0.081
		0-47	0.9	439	-0.025	-0.091, 0.042	0.466
		0-71	0.9	439	-0.016	-0.107, 0.075	0.733
		0-95	0.9	436	-0.014	-0.113, 0.085	0.787
	PES						
	O ₃ (ppb)	0-71	4.1	661	-0.07	-0.19, 0.05	0.268
	PES	0-71	9.3	661	0.12	0.03, 0.22	0.012
Ln of SDNN (5 min; ms)							
LF/HF Ratio							

	NO ₂ (ppb)						
		0	15.2	608	-0.15	-0.32, 0.02	0.070
		0-2	15.2	575	-0.17	-0.34, 0.00	0.048
	Ambient	0-11	16.1	622	-0.02	-0.19, 0.14	0.767
	O ₃ (ppb)	0-23	13.7	628	-0.07	-0.23, 0.09	0.403
		0-47	11.3	631	-0.13	-0.29, 0.03	0.100
		0-71	11.0	628	-0.15	-0.31, 0.02	0.093
		0-95	10.3	631	-0.16	-0.34, 0.02	0.080
		0	5.9	599	-0.07	-0.18, 0.03	0.150
		0-2	5.8	582	-0.03	-0.13, 0.08	0.611
	Ambient	0-11	5.4	605	-0.05	-0.15, 0.06	0.377
	PM _{2.5} (µg/m ³)	0-23	4.9	611	-0.03	-0.15, 0.09	0.654
		0-47	4.6	611	-0.06	-0.18, 0.07	0.381
		0-71	4.7	614	-0.06	-0.20, 0.08	0.392
		0-95	4.3	611	-0.06	-0.19, 0.07	0.387
		0	0.126	609	-0.02	-0.19, 0.16	0.863
		0-2	0.143	597	0.04	-0.14, 0.23	0.648
	Ambient	0-11	0.144	614	-0.04	-0.18, 0.09	0.520
	CO (ppm)	0-23	0.129	617	-0.01	-0.16, 0.15	0.927
		0-47	0.109	617	0.02	-0.12, 0.16	0.805
		0-71	0.106	617	-0.03	-0.18, 0.12	0.669
		0-95	0.108	614	-0.05	-0.21, 0.11	0.513
		0	4.6	583	0.04	-0.04, 0.12	0.345
		0-2	5.5	571	0.08	-0.04, 0.19	0.163
	Ambient	0-11	7.9	591	0.00	-0.12, 0.13	0.949
	NO ₂ (ppb)	0-23	6.1	597	0.03	-0.10, 0.16	0.677
		0-47	5.1	597	0.03	-0.09, 0.15	0.645
		0-71	5.2	594	0.04	-0.09, 0.17	0.554
		0-95	4.2	591	0.04	-0.07, 0.15	0.528
		0	0.8	428	-0.04	-0.13, 0.06	0.421
		0-2	0.9	425	-0.04	-0.11, 0.03	0.305
	Ambient	0-11	0.8	431	-0.06	-0.16, 0.05	0.274
	SO ₂ (ppb)	0-23	0.9	436	-0.01	-0.13, 0.11	0.829
		0-47	0.9	439	0.05	-0.09, 0.19	0.520
		0-71	0.9	439	0.05	-0.13, 0.25	0.576
		0-95	0.9	436	0.09	-0.12, 0.30	0.407

ST Segment

	PES						
	O ₃ (ppb)	0-71	4.1	661	-0.7	-2.3, 0.9	0.401
	PES						
	NO ₂ (ppb)	0-71	9.3	661	0.4	-0.9, 1.6	0.577
		0	15.2	608	-0.8	-3.0, 1.4	0.451
		0-2	15.2	575	-1.0	-3.2, 1.1	0.352
	Ambient	0-11	16.1	622	-1.8	-3.9, 0.3	0.094
	O ₃ (ppb)	0-23	13.7	628	-1.1	-3.2, 0.9	0.288
		0-47	11.3	631	-0.9	-2.9, 1.2	0.403
		0-71	11.0	628	-1.2	-3.4, 1.0	0.289
		0-95	10.3	631	-1.5	-3.8, 0.9	0.224

ST in II
(5 min)
(µV)

		0	5.9	599	-0.8	-2.1, 0.5	0.225
		0-2	5.8	582	-0.5	-1.6, 0.7	0.429
	Ambient	0-11	5.4	605	0.0	-1.3, 1.3	0.985
	PM _{2.5}	0-23	4.9	611	-0.2	-1.7, 1.3	0.838
	($\mu\text{g}/\text{m}^3$)	0-47	4.6	611	1.1	-0.5, 2.7	0.188
		0-71	4.7	614	1.5	-0.3, 3.2	0.099
		0-95	4.3	611	1.3	-0.5, 3.0	0.154
		0	0.126	609	-0.6	-2.9, 1.7	0.597
		0-2	0.143	597	-0.7	-3.1, 1.8	0.593
	Ambient	0-11	0.144	614	-0.1	-1.8, 1.7	0.935
	CO	0-23	0.129	617	-0.6	-2.6, 1.4	0.576
	(ppm)	0-47	0.109	617	-0.5	-2.4, 1.4	0.610
		0-71	0.106	617	0.7	-1.3, 2.6	0.509
		0-95	0.108	614	0.8	-1.3, 2.9	0.473
		0	4.6	583	-0.1	-1.3, 1.0	0.797
		0-2	5.5	571	-0.1	-1.6, 1.4	0.871
	Ambient	0-11	7.9	591	0.0	-1.6, 1.6	0.995
	NO ₂	0-23	6.1	597	0.2	-1.6, 1.9	0.851
	(ppb)	0-47	5.1	597	0.3	-1.3, 2.0	0.680
		0-71	5.2	594	0.7	-1.0, 2.5	0.410
		0-95	4.2	591	0.5	-1.0, 2.0	0.512
		0	0.8	428	0.5	-0.8, 1.7	0.463
		0-2	0.9	425	0.7	-0.2, 1.6	0.139
	Ambient	0-11	0.8	431	1.1	-0.2, 2.4	0.091
	SO ₂	0-23	0.9	436	0.5	-1.0, 2.0	0.542
	(ppb)	0-47	0.9	439	1.5	-0.3, 3.2	0.101
		0-71	0.9	439	2.7	0.3, 5.1	0.029
		0-95	0.9	436	2.8	0.1, 5.4	0.040
	PES						
	O ₃	0-71	4.1	658	-0.011	-0.034, 0.011	0.326
	(ppb)						
	PES						
	NO ₂	0-71	9.3	658	0.009	-0.009, 0.027	0.317
	(ppb)						
		0	15.2	605	-0.023	-0.053, 0.007	0.136
		0-2	15.2	575	-0.027	-0.058, 0.004	0.085
	Ambient	0-11	16.1	619	-0.012	-0.042, 0.018	0.419
	O ₃	0-23	13.7	625	-0.017	-0.046, 0.012	0.262
	(ppb)	0-47	11.3	628	-0.020	-0.048, 0.008	0.164
		0-71	11.0	625	-0.014	-0.044, 0.017	0.371
		0-95	10.3	628	-0.007	-0.039, 0.026	0.684
		0	5.9	596	-0.001	-0.020, 0.018	0.931
		0-2	5.8	579	-0.001	-0.017, 0.016	0.942
	Ambient	0-11	5.4	602	0.003	-0.016, 0.023	0.752
	PM _{2.5}	0-23	4.9	608	-0.001	-0.023, 0.021	0.945
	($\mu\text{g}/\text{m}^3$)	0-47	4.6	608	0.009	-0.014, 0.032	0.450
		0-71	4.7	611	0.009	-0.016, 0.035	0.465
		0-95	4.3	608	0.009	-0.016, 0.033	0.485
	Ambient	0	0.126	606	0.002	-0.029, 0.034	0.883
	CO	0-2	0.143	594	-0.001	-0.035, 0.032	0.933
	(ppm)	0-11	0.144	611	-0.003	-0.028, 0.021	0.789

Ln of
ST in V2
(5 min)
(μV)

		0-23	0.129	614	0.005	-0.022, 0.033	0.706
		0-47	0.109	614	0.015	-0.012, 0.041	0.276
		0-71	0.106	614	0.017	-0.009, 0.044	0.203
		0-95	0.108	611	0.018	-0.011, 0.046	0.217
		0	4.6	580	0.005	-0.010, 0.019	0.507
		0-2	5.5	568	0.007	-0.012, 0.026	0.481
	Ambient	0-11	7.9	588	-0.006	-0.027, 0.015	0.596
	NO ₂	0-23	6.1	594	-0.002	-0.024, 0.020	0.856
	(ppb)	0-47	5.1	594	0.008	-0.012, 0.028	0.443
		0-71	5.2	591	0.012	-0.010, 0.034	0.278
		0-95	4.2	588	0.014	-0.004, 0.033	0.132
		0	0.8	425	0.003	-0.014, 0.020	0.725
		0-2	0.9	422	0.000	-0.013, 0.013	0.997
	Ambient	0-11	0.8	428	-0.005	-0.024, 0.013	0.560
	SO ₂	0-23	0.9	433	-0.010	-0.031, 0.012	0.373
	(ppb)	0-47	0.9	436	0.010	-0.015, 0.035	0.445
		0-71	0.9	436	0.012	-0.022, 0.046	0.497
		0-95	0.9	433	0.007	-0.030, 0.045	0.692

Systemic Inflammation

	PES						
	O ₃	0-71	4.1	440	0.234	-0.093, 0.561	0.160
	(ppb)						
	PES						
	NO ₂	0-71	9.3	440	0.016	-0.256, 0.288	0.907
	(ppb)						
		0	15.2	405	-0.05	-0.536, 0.436	0.840
		0-2	15.2	384	-0.164	-0.668, 0.341	0.524
	Ambient	0-11	16.1	416	-0.385	-0.872, 0.102	0.121
	O ₃	0-23	13.7	420	-0.371	-0.849, 0.106	0.127
	(ppb)	0-47	11.3	422	-0.191	-0.653, 0.27	0.416
		0-71	11.0	420	0.002	-0.491, 0.495	0.995
		0-95	10.3	422	0.045	-0.464, 0.554	0.861
		0	5.9	402	0.271	-0.022, 0.564	0.069
		0-2	5.8	390	0.257	0.003, 0.511	0.047
	Ambient	0-11	5.4	406	0.337	0.036, 0.638	0.028
	PM _{2.5}	0-23	4.9	410	0.277	-0.060, 0.613	0.107
	(µg/m ³)	0-47	4.6	410	0.083	-0.271, 0.437	0.645
		0-71	4.7	412	-0.033	-0.424, 0.358	0.867
		0-95	4.3	410	-0.12	-0.495, 0.256	0.531
		0	0.126	407	-0.125	-0.612, 0.362	0.615
		0-2	0.143	399	-0.102	-0.620, 0.416	0.699
	Ambient	0-11	0.144	411	0.072	-0.304, 0.447	0.707
	CO	0-23	0.129	413	0.086	-0.342, 0.514	0.692
	(ppm)	0-47	0.109	413	-0.160	-0.561, 0.241	0.433
		0-71	0.106	413	-0.304	-0.715, 0.107	0.147
		0-95	0.108	411	-0.450	-0.886, -0.015	0.043
		0	4.6	391	0.003	-0.222, 0.227	0.980
	Ambient	0-2	5.5	383	0.027	-0.267, 0.322	0.855
	NO ₂	0-11	7.9	397	0.222	-0.123, 0.567	0.206
	(ppb)	0-23	6.1	401	0.174	-0.170, 0.518	0.321
		0-47	5.1	401	-0.015	-0.336, 0.306	0.926

IL-6
(pg/mL)

		0-71	5.2	400	-0.181	-0.524, 0.163	0.301
		0-95	4.2	398	-0.237	-0.528, 0.055	0.111
		0	0.8	286	0.071	-0.213, 0.355	0.623
		0-2	0.9	284	0.051	-0.169, 0.272	0.648
	Ambient	0-11	0.8	288	0.060	-0.248, 0.368	0.701
	SO ₂	0-23	0.9	292	0.145	-0.221, 0.510	0.437
	(ppb)	0-47	0.9	294	0.027	-0.400, 0.454	0.901
		0-71	0.9	294	0.036	-0.544, 0.615	0.904
		0-95	0.9	292	0.042	-0.581, 0.666	0.894
	PES						
	O ₃	0-71	4.1	440	0.062	-0.007, 0.13	0.078
	(ppb)						
	PES						
	NO ₂	0-71	9.3	440	-0.091	-0.148, -0.034	0.002
	(ppb)						
		0	15.2	405	-0.063	-0.167, 0.041	0.234
		0-2	15.2	384	-0.066	-0.169, 0.037	0.209
	Ambient	0-11	16.1	416	0.037	-0.069, 0.144	0.490
	O ₃	0-23	13.7	420	0.053	-0.051, 0.158	0.317
	(ppb)	0-47	11.3	422	0.042	-0.059, 0.143	0.414
		0-71	11.0	420	0.033	-0.075, 0.141	0.553
		0-95	10.3	422	-0.034	-0.145, 0.077	0.549
		0	5.9	402	-0.07	-0.135, -0.006	0.033
		0-2	5.8	390	-0.058	-0.115, -0.001	0.045
	Ambient	0-11	5.4	406	-0.030	-0.096, 0.037	0.382
	PM _{2.5}	0-23	4.9	410	-0.017	-0.091, 0.057	0.651
	(µg/m ³)	0-47	4.6	410	0.035	-0.042, 0.113	0.372
		0-71	4.7	412	0.055	-0.030, 0.141	0.202
		0-95	4.3	410	0.076	-0.006, 0.157	0.068
		0	0.126	407	0.07	-0.036, 0.175	0.195
		0-2	0.143	399	0.043	-0.067, 0.153	0.444
	Ambient	0-11	0.144	411	0.006	-0.075, 0.087	0.884
	CO	0-23	0.129	413	0.044	-0.048, 0.137	0.347
	(ppm)	0-47	0.109	413	0.113	0.027, 0.199	0.010
		0-71	0.106	413	0.123	0.035, 0.211	0.006
		0-95	0.108	411	0.161	0.069, 0.252	0.001
		0	4.6	391	0.021	-0.031, 0.073	0.430
		0-2	5.5	383	0.016	-0.051, 0.083	0.639
	Ambient	0-11	7.9	397	-0.01	-0.087, 0.067	0.802
	NO ₂	0-23	6.1	401	0.013	-0.063, 0.09	0.734
	(ppb)	0-47	5.1	401	0.066	-0.005, 0.136	0.067
		0-71	5.2	400	0.067	-0.008, 0.143	0.080
		0-95	4.2	398	0.075	0.012, 0.138	0.021
		0	0.8	286	-0.015	-0.07, 0.04	0.592
		0-2	0.9	284	-0.016	-0.059, 0.026	0.452
	Ambient	0-11	0.8	288	0.012	-0.049, 0.072	0.707
	SO ₂	0-23	0.9	292	0.009	-0.063, 0.08	0.815
	(ppb)	0-47	0.9	294	0.011	-0.073, 0.095	0.792
		0-71	0.9	294	0.033	-0.082, 0.148	0.570
		0-95	0.9	292	0.051	-0.072, 0.174	0.413
	PES	0-71	4.1	440	0.016	-0.054, 0.086	0.653

Ln of
Fibrinogen
(µg/mL)

	O ₃ (ppb)						
	PES						
	NO ₂ (ppb)	0-71	9.3	440	-0.016	-0.074, 0.041	0.578
		0	15.2	405	0.162	0.056, 0.267	0.003
		0-2	15.2	384	0.122	0.016, 0.228	0.024
	Ambient	0-11	16.1	416	0.052	-0.052, 0.155	0.329
	O ₃ (ppb)	0-23	13.7	420	0.083	-0.019, 0.185	0.112
		0-47	11.3	422	0.054	-0.045, 0.153	0.284
		0-71	11.0	420	0.054	-0.052, 0.16	0.315
		0-95	10.3	422	0.038	-0.075, 0.151	0.508
		0	5.9	402	-0.030	-0.096, 0.035	0.360
		0-2	5.8	390	-0.009	-0.064, 0.046	0.738
	Ambient	0-11	5.4	406	0.012	-0.053, 0.077	0.717
	PM _{2.5} (µg/m ³)	0-23	4.9	410	0.011	-0.062, 0.084	0.774
		0-47	4.6	410	0.008	-0.068, 0.084	0.835
		0-71	4.7	412	0.024	-0.061, 0.108	0.581
		0-95	4.3	410	0.041	-0.042, 0.124	0.335
		0	0.126	407	0.008	-0.101, 0.118	0.879
		0-2	0.143	399	0.060	-0.052, 0.173	0.293
	Ambient	0-11	0.144	411	0.049	-0.032, 0.13	0.234
	CO (ppm)	0-23	0.129	413	0.068	-0.024, 0.161	0.146
		0-47	0.109	413	0.071	-0.016, 0.158	0.110
		0-71	0.106	413	0.064	-0.025, 0.154	0.158
		0-95	0.108	411	0.069	-0.028, 0.166	0.161
		0	4.6	391	-0.010	-0.063, 0.043	0.709
		0-2	5.5	383	0.021	-0.047, 0.089	0.541
	Ambient	0-11	7.9	397	0.083	0.007, 0.158	0.032
	NO ₂ (ppb)	0-23	6.1	401	0.082	0.005, 0.158	0.037
		0-47	5.1	401	0.061	-0.011, 0.133	0.097
		0-71	5.2	400	0.046	-0.030, 0.123	0.235
		0-95	4.2	398	0.036	-0.029, 0.101	0.280
		0	0.8	286	-0.014	-0.072, 0.044	0.634
		0-2	0.9	284	0.001	-0.044, 0.046	0.976
	Ambient	0-11	0.8	288	0.032	-0.031, 0.094	0.324
	SO ₂ (ppb)	0-23	0.9	292	0.020	-0.055, 0.096	0.596
		0-47	0.9	294	0.008	-0.080, 0.096	0.858
		0-71	0.9	294	0.022	-0.097, 0.142	0.712
		0-95	0.9	292	0.035	-0.093, 0.164	0.590

Vascular Function

	PES						
	O ₃ (ppb)	0-71	4.1	684	-0.2	-0.9, 0.4	0.501
	PES						
	NO ₂ (ppb)	0-71	9.3	684	0.2	-0.3, 0.7	0.505
		0	15.2	630	-0.1	-1.0, 0.8	0.841
	Ambient	0-2	15.2	597	0.4	-0.5, 1.3	0.373
	O ₃ (ppb)	0-11	16.1	645	-0.2	-1.1, 0.7	0.701
		0-23	13.7	651	-0.5	-1.4, 0.4	0.285

Diastolic
Blood
Pressure
(mmHg)

		0-47	11.3	654	-0.7	-1.6, 0.2	0.107
		0-71	11.0	651	-0.4	-1.3, 0.5	0.408
		0-95	10.3	654	-0.2	-1.2, 0.7	0.639
		0	5.9	621	-0.6	-1.2, -0.1	0.032
		0-2	5.8	603	-0.8	-1.4, -0.2	0.008
	Ambient	0-11	5.4	627	-0.4	-1.0, 0.1	0.138
	PM _{2.5}	0-23	4.9	633	-0.6	-1.2, 0.1	0.107
	($\mu\text{g}/\text{m}^3$)	0-47	4.6	633	-0.1	-0.8, 0.6	0.761
		0-71	4.7	636	0.2	-0.6, 1.0	0.640
		0-95	4.3	633	0.4	-0.3, 1.2	0.253
		0	0.126	630	0.5	-0.5, 1.4	0.318
		0-2	0.143	618	0.4	-0.6, 1.4	0.475
	Ambient	0-11	0.144	636	0.5	-0.2, 1.3	0.146
	CO	0-23	0.129	639	0.9	0.0, 1.7	0.039
	(ppm)	0-47	0.109	639	1.1	0.3, 1.9	0.008
		0-71	0.106	639	1.1	0.3, 1.9	0.009
		0-95	0.108	636	1.2	0.4, 2.1	0.006
		0	4.6	603	0.2	-0.3, 0.7	0.376
		0-2	5.5	591	0.1	-0.5, 0.7	0.762
	Ambient	0-11	7.9	612	0.4	-0.3, 1.1	0.230
	NO ₂	0-23	6.1	618	0.5	-0.2, 1.2	0.134
	(ppb)	0-47	5.1	618	0.4	-0.2, 1.1	0.188
		0-71	5.2	615	0.2	-0.5, 1.0	0.495
		0-95	4.2	612	0.3	-0.3, 0.9	0.351
		0	0.8	444	-0.5	-1.0, 0.0	0.068
		0-2	0.9	441	-0.4	-0.8, 0.1	0.087
	Ambient	0-11	0.8	447	-0.4	-1.0, 0.2	0.153
	SO ₂	0-23	0.9	453	-0.8	-1.5, -0.1	0.027
	(ppb)	0-47	0.9	456	-0.1	-0.9, 0.7	0.853
		0-71	0.9	456	-0.3	-1.4, 0.8	0.622
		0-95	0.9	453	-0.5	-1.6, 0.7	0.433
	PES						
	O ₃	0-71	4.1	440	-0.03	-0.07, 0.01	0.157
	(ppb)						
	PES						
	NO ₂	0-71	9.3	440	-0.01	-0.04, 0.02	0.659
	(ppb)						
		0	15.2	405	0.05	-0.01, 0.11	0.080
		0-2	15.2	384	0.03	-0.02, 0.09	0.259
	Ambient	0-11	16.1	416	0.02	-0.04, 0.07	0.524
	O ₃	0-23	13.7	420	0.03	-0.03, 0.08	0.339
	(ppb)	0-47	11.3	422	0.02	-0.03, 0.07	0.419
		0-71	11.0	420	0.03	-0.03, 0.09	0.283
		0-95	10.3	422	0.03	-0.03, 0.08	0.374
		0	5.9	402	0.02	-0.01, 0.06	0.146
		0-2	5.8	390	0.03	0.00, 0.07	0.067
	Ambient	0-11	5.4	406	0.02	-0.01, 0.06	0.218
	PM _{2.5}	0-23	4.9	410	0.02	-0.02, 0.05	0.447
	($\mu\text{g}/\text{m}^3$)	0-47	4.6	410	-0.01	-0.05, 0.03	0.632
		0-71	4.7	412	-0.02	-0.07, 0.02	0.347
		0-95	4.3	410	-0.01	-0.06, 0.03	0.549

Endothelin-
1
(pg/mL)

		0	0.126	407	0.06	0.01, 0.12	0.030
		0-2	0.143	399	0.07	0.01, 0.13	0.033
	Ambient	0-11	0.144	411	0.02	-0.03, 0.06	0.418
	CO	0-23	0.129	413	0.02	-0.03, 0.07	0.491
	(ppm)	0-47	0.109	413	0.02	-0.03, 0.06	0.507
		0-71	0.106	413	0.01	-0.04, 0.06	0.591
		0-95	0.108	411	0.02	-0.04, 0.07	0.549
		0	4.6	391	0.02	-0.01, 0.05	0.137
		0-2	5.5	383	0.02	-0.02, 0.05	0.315
	Ambient	0-11	7.9	397	0.01	-0.03, 0.05	0.754
	NO ₂	0-23	6.1	401	0.00	-0.04, 0.04	0.926
	(ppb)	0-47	5.1	401	-0.01	-0.05, 0.03	0.562
		0-71	5.2	400	-0.01	-0.05, 0.03	0.633
		0-95	4.2	398	-0.01	-0.04, 0.02	0.566
		0	0.8	286	0.03	0.00, 0.06	0.086
		0-2	0.9	284	0.03	0.01, 0.05	0.010
	Ambient	0-11	0.8	288	0.02	-0.02, 0.05	0.334
	SO ₂	0-23	0.9	292	0.05	0.01, 0.09	0.019
	(ppb)	0-47	0.9	294	0.07	0.03, 0.12	0.002
		0-71	0.9	294	0.08	0.02, 0.14	0.011
		0-95	0.9	292	0.09	0.02, 0.16	0.007
	PES						
	O ₃	0-71	4.1	213	3.8	1.1, 6.5	0.007
	(ppb)						
	PES						
	NO ₂	0-71	9.3	213	1.1	-1.2, 3.5	0.340
	(ppb)						
		0	15.2	198	3.9	-0.6, 8.3	0.089
		0-2	15.2	187	3.2	-1.1, 7.4	0.146
	Ambient	0-11	16.1	202	3.4	-1.0, 7.9	0.131
	O ₃	0-23	13.7	204	2.0	-2.4, 6.4	0.364
	(ppb)	0-47	11.3	205	0.3	-3.9, 4.5	0.885
		0-71	11.0	204	-0.6	-5.0, 3.8	0.773
		0-95	10.3	205	-0.9	-5.4, 3.6	0.695
		0	5.9	195	-0.5	-3.2, 2.3	0.740
		0-2	5.8	189	-0.2	-2.6, 2.3	0.899
	Ambient	0-11	5.4	197	-2.0	-5.0, 1.1	0.214
	PM _{2.5}	0-23	4.9	198	-1.3	-4.7, 2.1	0.445
	(µg/m ³)	0-47	4.6	198	-2.3	-5.6, 1.0	0.164
		0-71	4.7	199	-2.8	-6.4, 0.8	0.123
		0-95	4.3	198	-2.4	-5.7, 1.0	0.167
		0	0.126	198	-3.4	-7.6, 0.8	0.111
		0-2	0.143	194	-2.7	-7.2, 1.7	0.226
	Ambient	0-11	0.144	200	-1.9	-5.3, 1.5	0.272
	CO	0-23	0.129	201	-2.3	-6.1, 1.5	0.235
	(ppm)	0-47	0.109	201	-2.0	-5.5, 1.5	0.265
		0-71	0.106	201	-1.6	-5.1, 1.9	0.373
		0-95	0.108	200	-2.1	-5.8, 1.6	0.258
	Ambient	0	4.6	188	-0.5	-2.5, 1.6	0.664
	NO ₂	0-2	5.5	184	-0.3	-3.0, 2.3	0.808
	(ppb)	0-11	7.9	191	-1.2	-4.2, 1.9	0.450

VTI
(cm)

		0-23	6.1	193	-1.3	-4.3, 1.7	0.386
		0-47	5.1	193	-1.3	-4.0, 1.5	0.368
		0-71	5.2	192	-1.2	-4.2, 1.7	0.415
		0-95	4.2	191	-1.2	-3.6, 1.3	0.354
		0	0.8	198	-2.3	-4.8, 0.1	0.062
		0-2	0.9	187	-0.9	-2.8, 1.0	0.380
	Ambient	0-11	0.8	202	-1.2	-3.9, 1.6	0.398
	SO ₂	0-23	0.9	204	-0.7	-4.0, 2.6	0.675
	(ppb)	0-47	0.9	205	-0.5	-4.5, 3.5	0.798
		0-71	0.9	204	-2.1	-7.6, 3.4	0.440
		0-95	0.9	205	-3.6	-9.5, 2.3	0.227
	PES						
	O ₃	0-71	4.1	208	-0.02	-0.04, 0.01	0.132
	(ppb)						
	PES						
	NO ₂	0-71	9.3	208	-0.02	-0.04, 0.00	0.084
	(ppb)						
		0	15.2	191	-0.01	-0.05, 0.02	0.477
		0-2	15.2	181	-0.02	-0.05, 0.02	0.375
	Ambient	0-11	16.1	195	0.01	-0.03, 0.04	0.628
	O ₃	0-23	13.7	197	0.00	-0.03, 0.04	0.865
	(ppb)	0-47	11.3	198	-0.01	-0.04, 0.03	0.708
		0-71	11.0	197	0.00	-0.04, 0.03	0.890
		0-95	10.3	198	0.00	-0.04, 0.03	0.915
		0	5.9	187	-0.01	-0.03, 0.02	0.650
		0-2	5.8	181	0.00	-0.02, 0.01	0.649
	Ambient	0-11	5.4	189	0.00	-0.02, 0.03	0.837
	PM _{2.5}	0-23	4.9	191	0.00	-0.02, 0.03	0.854
	(µg/m ³)	0-47	4.6	191	0.00	-0.03, 0.02	0.953
		0-71	4.7	192	-0.01	-0.03, 0.02	0.595
		0-95	4.3	192	-0.01	-0.04, 0.02	0.401
		0	0.126	191	0.00	-0.03, 0.04	0.878
		0-2	0.143	187	0.01	-0.03, 0.05	0.616
	Ambient	0-11	0.144	193	0.00	-0.03, 0.02	0.927
	CO	0-23	0.129	194	0.00	-0.03, 0.03	0.788
	(ppm)	0-47	0.109	194	0.01	-0.02, 0.03	0.610
		0-71	0.106	194	0.01	-0.02, 0.04	0.604
		0-95	0.108	193	0.01	-0.02, 0.04	0.526
		0	4.6	182	0.01	-0.01, 0.02	0.461
		0-2	5.5	178	0.01	-0.01, 0.04	0.238
	Ambient	0-11	7.9	185	-0.01	-0.04, 0.01	0.374
	NO ₂	0-23	6.1	186	-0.01	-0.04, 0.01	0.284
	(ppb)	0-47	5.1	186	0.00	-0.02, 0.03	0.962
		0-71	5.2	185	0.00	-0.03, 0.03	0.988
		0-95	4.2	184	0.00	-0.02, 0.03	0.739
		0	0.8	132	0.01	-0.01, 0.03	0.386
		0-2	0.9	131	0.01	-0.01, 0.02	0.285
	Ambient	0-11	0.8	133	0.01	-0.01, 0.03	0.380
	SO ₂	0-23	0.9	135	0.00	-0.03, 0.03	0.972
	(ppb)	0-47	0.9	136	-0.01	-0.04, 0.02	0.562
		0-71	0.9	136	-0.01	-0.06, 0.03	0.509

BAD
(mm)

		0-95	0.9	135	-0.01	-0.05, 0.04	0.808
	PES						
	O ₃ (ppb)	0-71	4.1	440	-0.01	-0.11, 0.09	0.877
	PES						
	NO ₂ (ppb)	0-71	9.3	440	-0.02	-0.11, 0.06	0.577
		0	15.2	405	0.15	-0.01, 0.30	0.062
		0-2	15.2	384	0.11	-0.05, 0.27	0.180
	Ambient	0-11	16.1	416	-0.02	-0.18, 0.13	0.756
	O ₃ (ppb)	0-23	13.7	420	-0.05	-0.20, 0.11	0.553
		0-47	11.3	422	-0.02	-0.17, 0.13	0.810
		0-71	11.0	420	0.00	-0.16, 0.15	0.964
		0-95	10.3	422	-0.12	-0.27, 0.04	0.147
		0	5.9	402	-0.07	-0.17, 0.02	0.135
		0-2	5.8	390	-0.05	-0.13, 0.03	0.228
	Ambient	0-11	5.4	406	-0.01	-0.11, 0.09	0.877
	PM _{2.5} (µg/m ³)	0-23	4.9	410	0.03	-0.08, 0.13	0.624
		0-47	4.6	410	0.00	-0.11, 0.12	0.942
		0-71	4.7	412	0.02	-0.11, 0.14	0.767
		0-95	4.3	410	0.06	-0.06, 0.17	0.368
		0	0.126	407	-0.03	-0.19, 0.13	0.723
		0-2	0.143	399	-0.01	-0.17, 0.16	0.956
	Ambient	0-11	0.144	411	0.03	-0.10, 0.15	0.667
	CO (ppm)	0-23	0.129	413	0.08	-0.06, 0.22	0.245
		0-47	0.109	413	0.12	-0.01, 0.25	0.068
		0-71	0.106	413	0.09	-0.05, 0.22	0.213
		0-95	0.108	411	0.12	-0.01, 0.26	0.079
		0	4.6	391	-0.02	-0.10, 0.05	0.535
		0-2	5.5	383	-0.03	-0.14, 0.07	0.515
	Ambient	0-11	7.9	397	0.03	-0.09, 0.14	0.668
	NO ₂ (ppb)	0-23	6.1	401	0.09	-0.02, 0.20	0.104
		0-47	5.1	401	0.12	0.02, 0.22	0.026
		0-71	5.2	400	0.10	-0.02, 0.21	0.091
		0-95	4.2	398	0.11	0.02, 0.20	0.019
		0	0.8	286	-0.01	-0.10, 0.08	0.768
		0-2	0.9	284	-0.06	-0.13, 0.01	0.074
	Ambient	0-11	0.8	288	0.00	-0.10, 0.10	0.981
	SO ₂ (ppb)	0-23	0.9	292	0.03	-0.08, 0.15	0.565
		0-47	0.9	294	0.05	-0.09, 0.19	0.459
		0-71	0.9	294	0.13	-0.05, 0.32	0.155
		0-95	0.9	292	0.18	-0.02, 0.36	0.071

Ln of von
Willebrand
Factor
(ng/mL)

APPENDIX D.

Aim 3: Two pollutant models: Change in pre-exposure Ln of HF and Ln of LF associated with each interquartile range (IQR) increase in ambient air pollutant concentration, by outcome and lag hours.

Lag Hours	n	O ₃		PM _{2.5}		CO		NO ₂	
		Change (95% CI)	p-value	Change (95% CI)	p-value	Change (95% CI)	p-value	Change (95% CI)	p-value
<i>Ln of HF (ln[ms²])</i>									
0	192	-0.240 (-0.556, 0.077)	0.136	0.022 (-0.163, 0.207)	0.813	---		---	
0-2	181	-0.165 (-0.493, 0.162)	0.319	0.006 (-0.192, 0.205)	0.951	---		---	
0-11	201	-0.110 (-0.399, 0.179)	0.451	-0.040 (-0.221, 0.141)	0.662	---		---	
0-23	205	-0.235 (-0.507, 0.036)	0.089	0.014 (-0.185, 0.212)	0.893	---		---	
0-47	205	-0.389 (-0.650, -0.128)	0.004	0.044 (-0.160, 0.248)	0.669	---		---	
0-71	205	-0.460 (-0.741, -0.180)	0.002	0.100 (-0.123, 0.323)	0.377	---		---	
0-95	204	-0.472 (-0.777, -0.167)	0.003	0.133 (-0.087, 0.352)	0.233	---		---	
0	200	-0.201 (-0.504, 0.102)	0.192	---		0.203 (-0.1109, 0.516)	0.203	---	
0-2	190	-0.133 (-0.452, 0.187)	0.413	---		0.165 (-0.184, 0.514)	0.350	---	
0-11	203	-0.203 (-0.548, 0.142)	0.247	---		-0.090 (-0.375, 0.194)	0.531	---	
0-23	205	-0.252 (-0.563, 0.059)	0.111	---		0.026 (-0.277, 0.329)	0.865	---	
0-47	206	-0.378 (-0.667, -0.089)	0.011	---		0.121 (-0.146, 0.388)	0.372	---	
0-71	206	-0.444 (-0.755, -0.133)	0.006	---		0.144 (-0.135, 0.422)	0.309	---	
0-95	206	-0.451 (-0.784, -0.119)	0.008	---		0.148 (-0.147, 0.443)	0.322	---	

0	189	-0.215 (-0.543, 0.113)	0.196	---	---	-0.022 (-0.211, 0.168)	0.823
0-2	178	-0.150 (-0.497, 0.198)	0.395	---	---	-0.037 (-0.273, 0.199)	0.754
0-11	196	-0.264 (-0.637, 0.110)	0.165	---	---	-0.182 (-0.464, 0.101)	0.205
0-23	199	-0.304 (-0.631, 0.024)	0.069	---	---	-0.083 (-0.343, 0.177)	0.529
0-47	199	-0.381 (-0.690, -0.071)	0.016	---	---	-0.003 (-0.240, 0.235)	0.982
0-71	199	-0.422 (-0.752, -0.092)	0.013	---	---	0.054 (-0.198, 0.306)	0.674
0-95	199	-0.450 (-0.810, -0.090)	0.015	---	---	0.036 (-0.181, 0.254)	0.743

Ln of LF (ln[ms²])

0	192	-0.043 (-0.327, 0.241)	0.363	0.106 (-0.055, 0.267)	0.194	---	---
0-2	181	0.006 (-0.252, 0.264)	0.767	0.088 (-0.085, 0.260)	0.314	---	---
0-11	201	-0.118 (-0.369, 0.133)	0.961	0.060 (-0.102, 0.221)	0.465	---	---
0-23	205	-0.191 (-0.434, 0.051)	0.352	0.098 (-0.084, 0.280)	0.289	---	---
0-47	205	-0.228 (-0.490, 0.033)	0.121	0.181 (-0.007, 0.369)	0.059	---	---
0-71	205	-0.195 (-0.475, 0.086)	0.086	0.230 (0.023, 0.437)	0.030	---	---
0-95	204	-0.017 (-0.290, 0.255)	0.172	0.249 (0.047, 0.450)	0.016	---	---
0	200	0.050 (-0.236, 0.337)	0.900			0.202 (-0.080, 0.483)	0.158
0-2	190	-0.010 (-0.324, 0.304)	0.728	---	---	0.190 (-0.122, 0.502)	0.231
0-11	203	-0.071 (-0.355, 0.214)	0.951	---	---	0.072 (-0.186, 0.329)	0.583
0-23	205	-0.152 (-0.420, 0.117)	0.624	---	---	0.141 (-0.134, 0.416)	0.312

0-47	206	-0.168 (-0.456, 0.120)	0.265	---	0.196 (-0.049, 0.442)	0.116	---
0-71	206	-0.125 (-0.433, 0.183)	0.250	---	0.245 (-0.011, 0.500)	0.061	---
0-95	206	-0.148 (-0.439, 0.144)	0.424	---	0.262 (-0.010, 0.533)	0.059	---
0	189	-0.010 (-0.404, 0.205)	0.317	---	---	---	-0.063 (-0.231, 0.104) 0.455
0-2	178	-0.143 (-0.484, 0.198)	0.518	---	---	---	-0.115 (-0.320, 0.091) 0.270
0-11	196	-0.158 (-0.457, 0.141)	0.409	---	---	---	-0.144 (-0.400, 0.113) 0.269
0-23	199	-0.196 (-0.479, 0.088)	0.297	---	---	---	-0.060 (-0.295, 0.175) 0.613
0-47	199	-0.211 (-0.514, 0.091)	0.175	---	---	---	0.023 (-0.193, 0.239) 0.833
0-71	199	-0.218 (-0.549, 0.113)	0.169	---	---	---	0.071 (-0.158, 0.301) 0.539
0-95	199	-0.240 (-0.556, 0.077)	0.195	---	---	---	0.047 (-0.152, 0.245) 0.643

APPENDIX G.

Twenty-four hour outcomes (same model as Aim 4 analyses): Change in pre-exposure biomarker concentrations associated with each interquartile range (IQR) increase in PES and ambient air pollutant concentration, by lag hours

Outcome	Pollutant	Lag Hours	IQR	N	Difference	95% Confidence Interval	P-value
<i>Heart Rate Variability (HRV)</i>							
Ln of RMSSD (24 hour) (ms)	PES						
	O ₃ (ppb)	0-71	4.1	226	0.013	-0.038, 0.063	0.612
	PES						
	NO ₂ (ppb)	0-71	9.3	226	0.016	-0.023, 0.055	0.425
	Ambient O ₃ (ppb)	0	15.2	208	0.006	-0.057, 0.069	0.842
		0-2	15.2	197	0.007	-0.057, 0.071	0.836
		0-11	16.1	213	0.006	-0.056, 0.067	0.856
		0-23	13.7	215	-0.002	-0.061, 0.057	0.948
		0-47	11.3	216	-0.024	-0.082, 0.033	0.405
		0-71	11.0	215	-0.029	-0.092, 0.033	0.351
	Ambient PM _{2.5} (µg/m ³)	0-95	10.3	216	-0.019	-0.085, 0.046	0.560
		0	5.9	205	0.000	-0.039, 0.038	0.981
		0-2	5.8	199	0.006	-0.034, 0.046	0.758
		0-11	5.4	207	0.003	-0.037, 0.043	0.891
		0-23	4.9	209	0.000	-0.045, 0.045	0.989
		0-47	4.6	209	-0.006	-0.054, 0.042	0.807
	Ambient CO (ppm)	0-71	4.7	210	0.000	-0.052, 0.052	0.999
		0-95	4.3	209	-0.002	-0.052, 0.048	0.946
		0	0.126	208	0.012	-0.055, 0.078	0.729
		0-2	0.143	204	0.014	-0.056, 0.084	0.687
		0-11	0.144	210	0.002	-0.048, 0.052	0.943
		0-23	0.129	211	0.014	-0.044, 0.072	0.628
	Ambient NO ₂ (ppb)	0-47	0.109	211	0.019	-0.037, 0.074	0.508
		0-71	0.106	211	0.015	-0.042, 0.072	0.600
0-95		0.108	210	0.004	-0.056, 0.064	0.887	
0		4.6	199	-0.014	-0.047, 0.018	0.383	
0-2		5.5	195	-0.009	-0.053, 0.035	0.676	
0-11		7.9	202	-0.036	-0.083, 0.011	0.132	
Ambient SO ₂ (ppb)	0-23	6.1	204	-0.024	-0.074, 0.025	0.334	
	0-47	5.1	204	-0.018	-0.065, 0.028	0.436	
	0-71	5.2	203	-0.017	-0.067, 0.034	0.514	
	0-95	4.2	202	-0.021	-0.063, 0.022	0.342	
	0	0.8	147	0.025	-0.008, 0.058	0.141	
	0-2	0.9	146	0.008	-0.019, 0.035	0.537	

		0-71	0.9	151	0.016	-0.053, 0.084	0.650
		0-95	0.9	150	0.006	-0.067, 0.080	0.863
Repolarization							
	PES						
	O ₃	0-71	4.1	226	0.013	-0.009, 0.036	0.234
	(ppb)						
	PES						
	NO ₂	0-71	9.3	226	-0.010	-0.027, 0.007	0.228
	(ppb)						
		0	15.2	208	-0.003	-0.033, 0.026	0.818
		0-2	15.2	197	-0.003	-0.033, 0.027	0.837
	Ambient	0-11	16.1	213	0.001	-0.027, 0.028	0.968
	O ₃	0-23	13.7	215	-0.004	-0.031, 0.023	0.769
	(ppb)	0-47	11.3	216	-0.009	-0.035, 0.017	0.505
		0-71	11.0	215	-0.009	-0.038, 0.019	0.522
		0-95	10.3	216	-0.017	-0.048, 0.014	0.282
		0	5.9	205	0.000	-0.017, 0.018	0.960
		0-2	5.8	199	-0.003	-0.022, 0.015	0.737
	Ambient	0-11	5.4	207	0.006	-0.012, 0.024	0.519
	PM _{2.5}	0-23	4.9	209	0.016	-0.005, 0.036	0.135
	(µg/m ³)	0-47	4.6	209	0.026	0.005, 0.047	0.017
		0-71	4.7	210	0.035	0.012, 0.058	0.003
		0-95	4.3	209	0.037	0.014, 0.060	0.002
		0	0.126	208	0.024	-0.007, 0.054	0.129
		0-2	0.143	204	0.021	-0.012, 0.054	0.204
	Ambient	0-11	0.144	210	0.011	-0.012, 0.034	0.343
	CO	0-23	0.129	211	0.023	-0.003, 0.049	0.088
	(ppm)	0-47	0.109	211	0.028	0.003, 0.052	0.030
		0-71	0.106	211	0.033	0.008, 0.058	0.011
		0-95	0.108	210	0.037	0.010, 0.065	0.008
		0	4.6	199	0.003	-0.012, 0.019	0.669
		0-2	5.5	195	0.012	-0.010, 0.033	0.277
	Ambient	0-11	7.9	202	0.005	-0.017, 0.028	0.631
	NO ₂	0-23	6.1	204	0.020	-0.004, 0.043	0.101
	(ppb)	0-47	5.1	204	0.025	0.004, 0.047	0.022
		0-71	5.2	203	0.032	0.008, 0.056	0.009
		0-95	4.2	202	0.027	0.007, 0.048	0.009
		0	0.8	147	0.001	-0.014, 0.015	0.930
		0-2	0.9	146	-0.006	-0.018, 0.006	0.338
	Ambient	0-11	0.8	148	-0.012	-0.028, 0.004	0.144
	SO ₂	0-23	0.9	150	-0.007	-0.026, 0.013	0.485
	(ppb)	0-47	0.9	151	-0.001	-0.024, 0.022	0.911
		0-71	0.9	151	-0.005	-0.036, 0.027	0.758
		0-95	0.9	150	-0.004	-0.039, 0.030	0.810
ST Segment							
	PES						
	O ₃	0-71	4.1	226	0.3	-1.9, 2.5	0.771
	(ppb)						
	PES						
	NO ₂	0-71	9.3	226	-0.5	-2.2, 1.2	0.562
	(ppb)						

	0-95	10.3	160	-0.501	-5.671, 4.669	0.848
	0	5.9	151	0.807	-2.392, 4.007	0.617
Ambient	0-2	5.8	146	-0.162	-3.722, 3.398	0.928
PM _{2.5}	0-11	5.4	151	0.284	-2.954, 3.522	0.862
(μg/m ³)	0-23	4.9	152	0.188	-3.409, 3.786	0.917
	0-47	4.6	152	-0.016	-3.788, 3.757	0.993
	0-71	4.7	153	0.141	-4.092, 4.374	0.947
	0-95	4.3	153	0.515	-3.502, 4.532	0.799
	0	0.126	155	-0.385	-5.881, 5.111	0.889
Ambient	0-2	0.143	153	-1.766	-7.648, 4.117	0.552
CO	0-11	0.144	155	-1.626	-5.892, 2.64	0.450
(ppm)	0-23	0.129	156	-1.495	-6.357, 3.368	0.542
	0-47	0.109	156	-0.562	-4.95, 3.825	0.799
	0-71	0.106	156	-1.093	-5.61, 3.425	0.631
	0-95	0.108	156	-0.792	-5.594, 4.009	0.743
	0	4.6	148	-0.722	-3.312, 1.867	0.58
Ambient	0-2	5.5	146	-1.993	-5.456, 1.47	0.255
NO ₂	0-11	7.9	149	-2.687	-6.432, 1.058	0.157
(ppb)	0-23	6.1	151	-1.451	-5.264, 2.363	0.451
	0-47	5.1	151	-0.595	-4.111, 2.921	0.737
	0-71	5.2	150	0.395	-3.539, 4.329	0.842
	0-95	4.2	150	1.003	-2.304, 4.31	0.547
	0	0.8	108	0.239	-3.024, 3.502	0.884
Ambient	0-2	0.9	108	-0.083	-2.928, 2.762	0.954
SO ₂	0-11	0.8	107	3.47	0.051, 6.889	0.047
(ppb)	0-23	0.9	109	3.02	-1.046, 7.087	0.142
	0-47	0.9	110	2.714	-2.249, 7.677	0.278
	0-71	0.9	110	2.733	-4.101, 9.568	0.426
	0-95	0.9	110	-2.047	-9.096, 5.002	0.563

APPENDIX H.

Sensitivity Analysis: Non-transformed outcomes — Aim 3: Outcome associated with each interquartile range (IQR) increase in ambient pollutant concentration, by lag hours

Outcome	Pollutant	Lag Hours	IQR	n	Estimate	95% Confidence Interval	p-value
HF (ms ²)	PES O ₃ (ppb)	0-71	4.1	224	122.6	-317.4, 562.6	0.582
	PES NO ₂ (ppb)	0-71	9.3	224	-210.4	-583.0, 162.2	0.266
	O ₃ (ppb)	0	15.2	206	-63.3	-819.2, 692.7	0.869
		0-2	15.2	195	83.4	-692.4, 859.2	0.832
		0-11	16.1	211	-496.4	-1227.1, 234.3	0.181
		0-23	13.7	213	-559.1	-1273.6, 155.5	0.124
		0-47	11.3	214	-883.6	-1574.0, -193.3	0.013
		0-71	11.0	213	-1171.5	-1891.2, -451.9	0.002
		0-95	10.3	214	-1157.0	-1890.6, -423.5	0.002
	PM _{2.5} (µg/m ³)	0	5.9	203	362.3	-104.8, 829.5	0.127
		0-2	5.8	197	256.0	-222.9, 734.9	0.292
		0-11	5.4	205	129.2	-356.7, 615.0	0.599
		0-23	4.9	207	149.5	-378.9, 677.9	0.576
		0-47	4.6	207	349.4	-181.7, 880.4	0.195
		0-71	4.7	208	348.0	-237.9, 934.0	0.242
		0-95	4.3	207	491.4	-71.7, 4054.6	0.087
	CO (ppm)	0	0.126	206	1217.1	486.6, 1947.6	0.001
		0-2	0.143	202	828.6	43.9, 1613.3	0.039
		0-11	0.144	208	549.0	-33.3, 1131.3	0.064
		0-23	0.129	209	714.4	58.4, 1370.4	0.033
		0-47	0.109	209	920.7	318.7, 1522.6	0.003
		0-71	0.106	209	1014.7	404.5, 1624.9	0.001
		0-95	0.108	208	1049.5	399.2, 1699.7	0.002
	NO ₂ (ppb)	0	4.6	197	180.1	-184.4, 544.7	0.329
		0-2	5.5	193	202.9	-275.5, 681.2	0.402
		0-11	7.9	200	445.1	-102.6, 992.7	0.110
		0-23	6.1	202	441.2	-95.4, 977.8	0.106
		0-47	5.1	202	572.7	81.3, 1064.2	0.023
0-71		5.2	201	646.3	129.5, 1163.1	0.015	
0-95		4.2	200	554.5	115.7, 993.2	0.014	
SO ₂ (ppb)	0	0.8	145	-183.5	-640.4, 273.5	0.426	
	0-2	0.9	144	-104.3	-453.4, 244.8	0.553	
	0-11	0.8	146	-132.8	-650.1, 384.5	0.611	
	0-23	0.9	148	-114.3	-750.3, 521.8	0.722	
	0-47	0.9	149	-278.0	-1012.0, 455.9	0.453	
	0-71	0.9	149	-526.1	-1561.4, 509.2	0.315	
	0-95	0.9	148	49.4	-1079.1, 1178.0	0.931	
LF (ms ²)	PES O ₃	0-71	4.1	224	-31.0	-173.3	0.667

	(ppb)						
	PES						
	NO ₂	0-71	9.3	224	-75.2	-186.9, 36.6	0.186
	(ppb)						
		0	15.2	206	19.3	-196.5, 235.0	0.860
		0-2	15.2	195	77.8	-136.2, 291.8	0.472
	O ₃	0-11	16.1	211	-34.1	-228.2, 160.0	0.728
	(ppb)	0-23	13.7	213	-67.0	-259.5, 125.5	0.492
		0-47	11.3	214	-210.2	-394.8, -25.6	0.026
		0-71	11.0	213	-234.6	-434.5, -34.7	0.022
		0-95	10.3	214	-231.0	-443.0, -19.0	0.033
		0	5.9	203	189.6	66.5, 312.7	0.003
		0-2	5.8	197	147.3	17.0, 277.7	0.027
	PM _{2.5}	0-11	5.4	205	133.2	2.9, 263.5	0.045
	(ug/m ³)	0-23	4.9	207	148.2	0.6, 295.8	0.049
		0-47	4.6	207	180.1	30.0, 330.1	0.019
		0-71	4.7	208	175.9	10.3, 341.4	0.038
		0-95	4.3	207	203.0	42.6, 363.5	0.014
		0	0.1	206	391.3	185.9, 596.8	0.000
		0-2	0.1	202	318.0	97.5, 538.6	0.005
	CO	0-11	0.1	208	133.4	-25.2, 291.9	0.098
	(ppm)	0-23	0.1	209	193.3	7.9, 378.7	0.041
		0-47	0.1	209	274.6	104.7, 444.5	0.002
		0-71	0.1	209	276.4	102.2, 450.5	0.002
		0-95	0.1	208	299.7	110.5, 488.9	0.002
		0	4.6	197	42.2	-65.7, 150.0	0.440
		0-2	5.5	193	13.6	-130.4, 157.7	0.852
	NO ₂	0-11	7.9	200	24.0	-131.8, 179.8	0.760
	(ppb)	0-23	6.1	202	57.3	-105.6, 220.2	0.487
		0-47	5.1	202	155.5	4.9, 306.0	0.043
		0-71	5.2	201	160.0	-2.6, 322.7	0.054
		0-95	4.2	200	130.0	-9.6, 269.7	0.068
		0	0.8	145	-0.9	-101.6, 99.8	0.986
		0-2	0.9	144	-7.6	-86.5, 71.3	0.848
	SO ₂	0-11	0.8	146	10.2	-100.3, 120.7	0.855
	(ppb)	0-23	0.9	148	5.6	-131.2, 142.4	0.935
		0-47	0.9	149	-81.4	-234.4, 71.6	0.293
		0-71	0.9	149	-132.1	-353.0, 88.8	0.237
		0-95	0.9	148	-42.1	-285.6, 201.4	0.732
	PES						
	O ₃	0-71	4.1	224	-20.0	-264.0, 223.9	0.871
	(ppb)						
	PES						
	NO ₂	0-71	9.3	224	-93.5	-277.5, 90.5	0.316
	(ppb)						
	O ₃	0	15.2	206	60.5	-291.1, 412.0	0.734
	(ppb)	0-2	15.2	195	12.5	-321.4, 346.4	0.941
T-wave amplitude (5 min) (μV)							

	0-11	16.1	211	-20.1	-325.6, 285.4	0.897	
	0-23	13.7	213	-28.6	-329.6, 272.4	0.851	
	0-47	11.3	214	-162.5	-461.5, 136.5	0.284	
	0-71	11.0	213	-54.1	-379.2, 271.0	0.742	
	0-95	10.3	214	-125.8	-478.0, 226.3	0.481	
PM _{2.5} (µg/m ³)	0	5.9	203	-0.7	-194.1, 192.8	0.994	
	0-2	5.8	197	-69.2	-224.4, 88.5	0.378	
	0-11	5.4	205	27.1	-175.0, 229.1	0.791	
	0-23	4.9			<i>Did not converge</i>		
	0-47	4.6	207	21.2	-162.1, 204.6	0.819	
	0-71	4.7	208	102.0	-149.1, 353.1	0.423	
	0-95	4.3	207	167.5	-76.4, 411.4	0.176	
CO (ppm)	0	0.1	206	298.5	-46.7, 643.7	0.089	
	0-2	0.1	202	309.2	-66.1, 684.5	0.105	
	0-11	0.1	208	172.7	-92.1, 437.5	0.199	
	0-23	0.1			<i>Did not converge</i>		
	0-47	0.1	209	169.4	-55.1, 393.8	0.138	
	0-71	0.1	209	69.1	-222.3, 360.5	0.640	
	0-95	0.1	208	69.9	-246.5, 386.3	0.662	
NO ₂ (ppb)	0	4.6	197	58.0	-118.4, 234.4	0.516	
	0-2	5.5	193	163.5	-82.5, 409.5	0.190	
	0-11	7.9	200	109.5	-145.2, 364.3	0.396	
	0-23	6.1	202	157.8	-114.3, 429.8	0.253	
	0-47	5.1	202	186.1	-62.7, 435.0	0.141	
	0-71	5.2	201	147.7	-115.5, 411.0	0.268	
	0-95	4.2	200	114.1	-116.9, 345.1	0.330	
SO ₂ (ppb)	0	0.8	145	-5.3	-174.6, 164.0	0.951	
	0-2	0.9	144	-57.7	-200.4, 85.1	0.423	
	0-11	0.8	146	-28.0	-228.2, 172.3	0.782	
	0-23	0.9	148	-46.3	-296.9, 204.2	0.714	
	0-47	0.9	149	-66.1	-346.6, 214.4	0.641	
	0-71	0.9	149	-200.4	-589.5, 188.8	0.309	
	0-95	0.9	148	-128.5	-566.3, 309.4	0.561	
PES O ₃ (ppb)	0-71	4.1	224	0.09	-0.48, 0.66	0.757	
PES NO ₂ (ppb)	0-71	9.3	224	-0.24	-0.70, 0.21	0.289	
C-reactive protein (mg/L)	0	15.2	206	-0.61	-1.42, 0.20	0.139	
	0-2	15.2	195	-0.80	-1.64, 0.04	0.062	
	O ₃ (ppb)	0-11	16.1	211	-0.82	-1.61, -0.04	0.040
		0-23	13.7	213	-0.70	-1.46, 0.06	0.072
		0-47	11.3	214	-0.37	-1.11, 0.37	0.321
		0-71	11.0	213	-0.53	-1.32, 0.25	0.182
		0-95	10.3	214	-0.49	-1.31, 0.33	0.237
	PM _{2.5} (ug/m ³)	0	5.9	203	0.54	0.07, 1.01	0.025
		0-2	5.8	197	0.64	0.14, 1.13	0.013
		0-11	5.4	205	0.44	-0.04, 0.92	0.075
0-23		4.9	207	0.29	-0.25, 0.84	0.291	
0-47		4.6	207	0.18	-0.39, 0.76	0.533	

		0-71	4.7	208	0.02	-0.62, 0.66	0.949
		0-95	4.3	207	-0.20	-0.83, 0.43	0.529
		0	0.1	206	0.69	-0.14, 0.52	0.104
		0-2	0.1	202	0.84	-0.06, 1.73	0.067
	CO	0-11	0.1	208	0.73	0.10, 1.36	0.022
	(ppm)	0-23	0.1	209	0.77	0.06, 1.49	0.034
		0-47	0.1	209	0.56	-0.12, 1.24	0.107
		0-71	0.1	209	0.61	-0.09, 1.32	0.086
		0-95	0.1	208	0.61	-0.15, 1.36	0.114
		0	4.6	198	0.20	-0.21, 0.61	0.340
		0-2	5.5	194	0.41	-0.14, 0.96	0.145
	NO ₂	0-11	7.9	201	0.50	-0.10, 1.10	0.104
	(ppb)	0-23	6.1	203	0.41	-0.20, 1.03	0.183
		0-47	5.1	203	0.27	-0.30, 0.84	0.354
		0-71	5.2	202	0.41	-0.21, 1.04	0.195
		0-95	4.2	201	0.29	-0.24, 0.83	0.280
		0	0.8	144	-0.04	-0.48, 0.40	0.848
		0-2	0.9	143	-0.08	-0.42, 0.27	0.659
	SO ₂	0-11	0.8	145	0.09	-0.38, 0.56	0.706
	(ppb)	0-23	0.9	147	0.14	-0.41, 0.70	0.608
		0-47	0.9	148	-0.05	-0.69, 0.59	0.868
		0-71	0.9	148	-0.14	-1.03, 0.74	0.749
		0-95	0.9	147	-0.08	-1.05, 0.88	0.862
	PES						
	O ₃	0-71	4.1	224	-5.2	-61.3, 50.9	0.855
	(ppb)						
	PES						
	NO ₂	0-71	9.3				
	(ppb)						
		0	15.2				
		0-2	15.2				
		0-11	16.1				
	O ₃	0-23	13.7				
	(ppb)	0-47	11.3				
		0-71	11.0				
		0-95	10.3				
		0	5.9				
		0-2	5.8				
		0-11	5.4				
	PM _{2.5}	0-23	4.9				
	(ug/m ³)	0-47	4.6				
		0-71	4.7				
		0-95	4.3				
		0	0.1				
		0-2	0.1				
		0-11	0.1				
	CO	0-23	0.1				
	(ppm)	0-47	0.1				
		0-71	0.1				
		0-95	0.1				
		0	4.6				
	NO ₂						

Did Not Converge

	(ppb)	0-2	5.5				
		0-11	7.9				
		0-23	6.1				
		0-47	5.1				
		0-71	5.2				
		0-95	4.2				
		0	0.8				
		0-2	0.9				
	SO ₂	0-11	0.8				
	(ppb)	0-23	0.9				
		0-47	0.9				
		0-71	0.9				
		0-95	0.9				
	PES						
	O ₃	0-71	4.1	198	-6.4	-12.3, -0.5	0.035
	(ppb)						
	PES						
	NO ₂	0-71	9.3	198	-5.6	-10.0, -1.2	0.014
	(ppb)						
		0	15.2	181	4.6	-4.0, 13.2	0.289
		0-2	15.2	172	7.2	-1.7, 16.1	0.110
	O ₃	0-11	16.1	188	4.7	-3.5, 12.9	0.257
	(ppb)	0-23	13.7	190	4.9	-2.9, 12.7	0.217
		0-47	11.3	190	4.7	-2.6, 12.1	0.204
		0-71	11.0	189	4.1	-3.9, 12.0	0.309
		0-95	10.3	189	3.4	-4.7, 11.4	0.407
		0	5.9	183	1.3	-3.5, 6.2	0.589
		0-2	5.8	179	-0.2	-5.4, 4.9	0.926
	PM _{2.5}	0-11	5.4	185	-1.7	-6.7, 3.4	0.516
	(ug/m ³)	0-23	4.9	186	-3.0	-8.7, 2.8	0.308
		0-47	4.6	186	-1.7	-7.7, 4.2	0.566
		0-71	4.7	187	-2.6	-9.1, 3.8	0.423
		0-95	4.3	186	-2.4	-8.7, 3.8	0.442
		0	0.1	180	3.8	-4.7, 12.3	0.377
		0-2	0.1	177	-0.9	-10.1, 8.4	0.853
	CO	0-11	0.1	183	-1.2	-7.7, 5.4	0.727
	(ppm)	0-23	0.1	184	-1.1	-8.5, 6.2	0.762
		0-47	0.1	184	-0.4	-7.3, 6.5	0.907
		0-71	0.1	184	0.9	-6.3, 8.1	0.805
		0-95	0.1	183	0.9	-6.7, 8.6	0.809
		0	4.6	175	0.6	-3.4, 4.7	0.757
		0-2	5.5	172	-1.6	-7.2, 4.0	0.570
	NO ₂	0-11	7.9	179	-0.4	-6.5, 5.7	0.907
	(ppb)	0-23	6.1	181	-0.7	-6.9, 5.4	0.814
		0-47	5.1	181	-0.3	-6.0, 5.4	0.918
		0-71	5.2	181	0.1	-6.1, 6.3	0.971
		0-95	4.2	180	0.1	-5.2, 5.4	0.960
		0	0.8	128	-0.2	-3.6, 3.2	0.911
	SO ₂	0-2	0.9	127	0.2	-2.3, 2.8	0.859
	(ppb)	0-11	0.8	130	-0.4	-3.8, 3.0	0.821
		0-23	0.9	131	0.4	-3.7, 4.6	0.832

Monocyte
platelet
conjugates
(count)

0-47	0.9	132	0.4	-4.4, 5.2	0.870
0-71	0.9	132	0.4	-6.1, 7.0	0.901
0-95	0.9	131	1.9	-5.2, 9.0	0.589

APPENDIX I.

Sensitivity Analysis: Models not including Relative Humidity — Aim 3: Outcome associated with each interquartile range (IQR) increase in ambient pollutant concentration, by lag hours

Outcome	Pollutant	Lag Hours	IQR	n	Estimate	95% Confidence Interval	p-value
Ln of HF (ms ²)	PES O ₃ (ppb)	0-71	4.1	240	-0.122	-0.317, 0.073	0.218
	PES NO ₂ (ppb)	0-71	9.3	240	0.072	-0.082, 0.225	0.357
	O ₃ (ppb)	0	15.2	222	-0.137	-0.376, 0.101	0.257
		0-2	15.2	210	-0.125	-0.379, 0.130	0.334
		0-11	16.1	226	-0.115	-0.367, 0.136	0.367
		0-23	13.7	229	-0.224	-0.461, 0.012	0.063
		0-47	11.3	230	-0.323	-0.544, -0.102	0.005
		0-71	11.0	229	-0.379	-0.612, -0.146	0.002
		0-95	10.3	230	-0.362	-0.607, -0.117	0.004
	PM _{2.5} (µg/m ³)	0	5.9	218	-0.023	-0.188, 0.142	0.784
		0-2	5.8	211	-0.022	-0.195, 0.152	0.806
		0-11	5.4	221	-0.022	-0.185, 0.141	0.787
		0-23	4.9	222	0.015	-0.164, 0.194	0.869
		0-47	4.6	223	0.082	-0.110, 0.274	0.401
		0-71	4.7	224	0.129	-0.081, 0.340	0.227
		0-95	4.3	223	0.165	-0.037, 0.367	0.109
	CO (ppm)	0	0.1	222	0.198	-0.071, 0.467	0.148
		0-2	0.1	217	0.115	-0.176, 0.405	0.437
		0-11	0.1	223	-0.049	-0.253, 0.154	0.633
		0-23	0.1	225	0.071	-0.148, 0.291	0.521
		0-47	0.1	225	0.193	-0.020, 0.407	0.076
		0-71	0.1	225	0.211	-0.006, 0.429	0.057
		0-95	0.1	224	0.225	-0.008, 0.459	0.059
	NO ₂ (ppb)	0	4.6	213	-0.038	-0.173, 0.096	0.574
		0-2	5.5	208	-0.036	-0.216, 0.144	0.691
		0-11	7.9	215	-0.109	-0.299, 0.081	0.259
		0-23	6.1	218	0.008	-0.178, 0.195	0.930
		0-47	5.1	218	0.097	-0.085, 0.278	0.293
0-71		5.2	217	0.141	-0.054, 0.335	0.156	
0-95		4.2	216	0.113	-0.049, 0.275	0.171	
SO ₂ (ppb)	0	0.8	145	0.049	-0.098, 0.197	0.506	
	0-2	0.9	144	0.019	-0.099, 0.136	0.752	
	0-11	0.8	146	0.000	-0.169, 0.169	0.999	
	0-23	0.9	148	-0.015	-0.214, 0.184	0.881	
	0-47	0.9	149	-0.036	-0.264, 0.191	0.750	
	0-71	0.9	149	-0.098	-0.406, 0.210	0.528	
	0-95	0.9	148	-0.051	-0.387, 0.284	0.761	
Ln of LF (ms ²)	PES O ₃ (ppb)	0-71	4.1	240	-0.003	-0.182, 0.176	0.972

	PES NO ₂ (ppb)	0-71	9.3	240	-0.052	0.194, 0.090	0.469
		0	15.2	222	-0.102	-0.315, 0.112	0.347
		0-2	15.2	210	-0.053	-0.280, 0.173	0.642
	O ₃ (ppb)	0-11	16.1	226	-0.072	-0.301, 0.157	0.534
		0-23	13.7	229	-0.135	-0.352, 0.081	0.218
		0-47	11.3	230	-0.210	-0.414, -0.006	0.044
		0-71	11.0	229	-0.234	-0.450, -0.018	0.034
		0-95	10.3	230	-0.202	-0.428, 0.024	0.079
		0	5.9	218	0.086	-0.057, 0.228	0.236
		0-2	5.8	211	0.079	-0.071, 0.228	0.300
	PM _{2.5} (ug/m ³)	0-11	5.4	221	0.046	-0.098, 0.190	0.527
		0-23	4.9	222	0.081	-0.082, 0.244	0.327
		0-47	4.6	223	0.178	0.005, 0.351	0.044
		0-71	4.7	224	0.210	0.019, 0.400	0.031
		0-95	4.3	223	0.208	0.027, 0.390	0.025
		0	0.1	222	0.107	-0.134, 0.347	0.382
		0-2	0.1	217	0.078	-0.179, 0.336	0.548
	CO (ppm)	0-11	0.1	223	-0.001	-0.185, 0.182	0.988
		0-23	0.1	225	0.043	-0.154, 0.240	0.665
		0-47	0.1	225	0.139	-0.053, 0.331	0.155
		0-71	0.1	225	0.156	-0.039, 0.352	0.116
		0-95	0.1	224	0.154	-0.056, 0.364	0.151
		0	4.6	213	-0.064	-0.182, 0.055	0.288
		0-2	5.5	208	-0.096	-0.253, 0.061	0.229
	NO ₂ (ppb)	0-11	7.9	215	-0.101	-0.272, 0.070	0.245
		0-23	6.1	218	-0.049	-0.214, 0.116	0.558
		0-47	5.1	218	0.034	-0.126, 0.195	0.672
		0-71	5.2	217	0.052	-0.121, 0.224	0.554
		0-95	4.2	216	0.025	-0.119, 0.169	0.736
		0	0.8	145	0.047	-0.085, 0.178	0.481
		0-2	0.9	144	0.030	-0.074, 0.134	0.566
	SO ₂ (ppb)	0-11	0.8	146	0.020	-0.129, 0.169	0.788
		0-23	0.9	148	-0.006	-0.183, 0.170	0.942
		0-47	0.9	149	-0.116	-0.316, 0.085	0.254
		0-71	0.9	149	-0.186	-0.457, 0.086	0.177
		0-95	0.9	148	-0.185	-0.480, 0.111	0.218
	PES O ₃ (ppb)	0-71	4.1	240	-0.001	-0.032, 0.030	0.937
	PES NO ₂ (ppb)	0-71	9.3	240	-0.006	-0.029, 0.018	0.633
		0	15.2	222	-0.014	-0.050, 0.021	0.431
	O ₃ (ppb)	0-2	15.2	210	-0.027	-0.064, 0.011	0.159
		0-11	16.1	226	-0.011	-0.048, 0.026	0.548
		0-23	13.7	229	-0.022	-0.057, 0.013	0.219
Ln of T- wave amplitude (5 min) (μV)							

		0-47	11.3	230	-0.031	-0.064, 0.002	0.066
		0-71	11.0	229	-0.026	-0.061, 0.009	0.144
		0-95	10.3	230	-0.028	-0.066, 0.009	0.133
	PM _{2.5} (ug/m ³)	0	5.9	218	0.011	-0.013, 0.034	0.373
		0-2	5.8	211	0.002	-0.023, 0.027	0.860
		0-11	5.4	221	0.005	-0.018, 0.028	0.681
		0-23	4.9	222	0.016	-0.010, 0.042	0.214
		0-47	4.6	223	0.008	-0.020, 0.036	0.575
		0-71	4.7	224	0.007	-0.024, 0.038	0.654
		0-95	4.3	223	0.012	-0.017, 0.041	0.419
	CO (ppm)	0	0.1	222	0.043	0.003, 0.083	0.035
		0-2	0.1	217	0.039	-0.005, 0.083	0.079
		0-11	0.1	223	0.013	-0.017, 0.044	0.390
		0-23	0.1	225	0.027	-0.006, 0.059	0.103
		0-47	0.1	225	0.026	-0.006, 0.058	0.115
		0-71	0.1	225	0.015	-0.018, 0.048	0.361
		0-95	0.1	224	0.017	-0.019, 0.052	0.353
	NO ₂ (ppb)	0	4.6	213	0.012	-0.008, 0.032	0.247
		0-2	5.5	208	0.024	-0.004, 0.052	0.090
		0-11	7.9	215	0.005	-0.024, 0.034	0.749
		0-23	6.1	218	0.015	-0.014, 0.043	0.311
		0-47	5.1	218	0.020	-0.007, 0.048	0.152
		0-71	5.2	217	0.019	-0.011, 0.048	0.210
		0-95	4.2	216	0.016	-0.009, 0.041	0.208
	SO ₂ (ppb)	0	0.8	145	-0.005	-0.026, 0.017	0.674
		0-2	0.9	144	-0.011	-0.029, 0.006	0.207
		0-11	0.8	146	-0.008	-0.033, 0.017	0.535
		0-23	0.9	148	-0.006	-0.036, 0.024	0.684
		0-47	0.9	149	-0.010	-0.044, 0.023	0.546
		0-71	0.9	149	-0.028	-0.073, 0.017	0.217
		0-95	0.9	148	-0.022	-0.071, 0.027	0.375
	PES O ₃ (ppb)	0-71	4.1	240	-0.355	-3.064, 2.353	0.796
	PES NO ₂ (ppb)	0-71	9.3	240	-1.474	-3.525, 0.578	0.158
ST in V5 (5 min) (μV)	O ₃ (ppb)	0	15.2	222	-0.563	-3.772, 2.645	0.729
		0-2	15.2	210	-1.431	-4.802, 1.940	0.402
		0-11	16.1	226	-1.287	-4.575, 2.001	0.440
		0-23	13.7	229	-1.355	-4.440, 1.730	0.387
		0-47	11.3	230	-1.305	-4.241, 1.631	0.381
		0-71	11.0	229	-0.47	-3.588, 2.649	0.766
		0-95	10.3	230	-0.531	-3.866, 2.805	0.754
	PM _{2.5} (ug/m ³)	0	5.9	218	0.375	-1.526, 2.276	0.697
		0-2	5.8	211	-0.042	-2.002, 1.917	0.966
		0-11	5.4	221	0.298	-1.592, 2.188	0.755
		0-23	4.9	222	0.977	-1.119, 3.074	0.358
		0-47	4.6	223	0.052	-2.210, 2.314	0.964
		0-71	4.7	224	-0.688	-3.158, 1.782	0.582
		0-95	4.3	223	-0.648	-3.062, 1.767	0.597

Systolic Blood Pressure (mmHg)	CO (ppm)	0	0.1	222	2.732	-0.922, 6.387	0.142
		0-2	0.1	217	3.578	-0.373, 7.530	0.076
		0-11	0.1	223	2.060	-0.675, 4.795	0.139
		0-23	0.1	225	2.146	-0.765, 5.058	0.147
		0-47	0.1	225	1.969	-0.916, 4.855	0.179
		0-71	0.1	225	0.485	-2.459, 3.428	0.745
		0-95	0.1	224	0.441	-2.769, 3.651	0.786
	NO ₂ (ppb)	0	4.6	213	0.939	-0.896, 2.773	0.313
		0-2	5.5	208	1.075	-1.423, 3.573	0.396
		0-11	7.9	215	1.644	-0.977, 4.264	0.217
		0-23	6.1	218	1.132	-1.416, 3.680	0.381
		0-47	5.1	218	1.479	-1.000, 3.958	0.240
		0-71	5.2	217	0.814	-1.819, 3.447	0.542
		0-95	4.2	216	0.441	-1.783, 2.665	0.695
	SO ₂ (ppb)	0	0.8	145	-0.283	-1.965, 1.399	0.739
		0-2	0.9	144	-0.511	-1.883, 0.862	0.461
		0-11	0.8	146	-0.359	-2.279, 1.562	0.711
		0-23	0.9	148	-0.412	-2.657, 1.833	0.716
		0-47	0.9	149	-1.254	-3.766, 1.257	0.324
		0-71	0.9	149	-1.344	-4.756, 2.067	0.436
		0-95	0.9	148	-0.814	-4.559, 2.931	0.667
PES O ₃ (ppb)	0-71	4.1	245	1.017	-0.283, 2.318	0.124	
PES NO ₂ (ppb)	0-71	9.3	245	-1.360	-2.377, -0.342	0.009	
O ₃ (ppb)	0	15.2	227	1.596	0.138, 3.054	0.032	
	0-2	15.2	215	1.313	-0.213, 2.840	0.091	
	0-11	16.1	231	0.585	-1.084, 2.253	0.490	
	0-23	13.7	234	0.729	-0.856, 2.314	0.365	
	0-47	11.3	235	0.408	-1.093, 1.909	0.592	
	0-71	11.0	234	0.376	-1.205, 1.957	0.639	
	0-95	10.3	235	0.971	-0.688, 2.630	0.249	
PM _{2.5} (ug/m ³)	0	5.9	223	0.303	-0.751, 1.358	0.570	
	0-2	5.8	216	0.748	-0.366, 1.862	0.187	
	0-11	5.4	226	0.284	-0.768, 1.337	0.594	
	0-23	4.9	227	0.400	-0.796, 1.596	0.509	
	0-47	4.6	228	0.129	-1.147, 1.406	0.841	
	0-71	4.7	229	0.053	-1.356, 1.463	0.941	
	0-95	4.3	228	0.285	-1.064, 1.634	0.677	
CO (ppm)	0	0.1	227	-0.077	-1.708, 1.553	0.925	
	0-2	0.1	222	0.217	-1.587, 2.021	0.812	
	0-11	0.1	228	0.016	-1.243, 1.275	0.980	
	0-23	0.1	230	-0.083	-1.452, 1.286	0.905	
	0-47	0.1	230	-0.041	-1.394, 1.312	0.952	
	0-71	0.1	230	-0.064	-1.463, 1.336	0.929	
	0-95	0.1	229	-0.082	-1.602, 1.437	0.914	
NO ₂ (ppb)	0	4.6	218	-0.203	-1.005, 0.599	0.618	
	0-2	5.5	213	0.029	-1.074, 1.132	0.959	
	0-11	7.9	220	-0.057	-1.270, 1.157	0.926	

		0-23	6.1	223	0.123	-1.042, 1.288	0.835
		0-47	5.1	223	0.471	-0.670, 1.612	0.416
		0-71	5.2	222	0.593	-0.654, 1.841	0.349
		0-95	4.2	221	0.425	-0.628, 1.477	0.426
	SO ₂ (ppb)	0	0.8	148	0.561	-0.464, 1.586	0.280
		0-2	0.9	147	0.498	-0.323, 1.319	0.231
		0-11	0.8	149	0.303	-0.888, 1.494	0.614
		0-23	0.9	151	0.546	-0.855, 1.947	0.441
		0-47	0.9	152	0.296	-1.328, 1.921	0.718
		0-71	0.9	152	0.103	-2.095, 2.301	0.926
		0-95	0.9	151	0.283	-2.108, 2.674	0.815
	PES O ₃ (ppb)	0-71	4.1	208	0.058	-0.376, 0.493	0.791
	PES NO ₂ (ppb)	0-71	9.3	208	-0.108	-0.436, 0.221	0.518
	O ₃ (ppb)	0	15.2	194	-0.031	-0.545, 0.483	0.906
		0-2	15.2	182	0.024	-0.523, 0.571	0.931
		0-11	16.1	196	0.264	-0.301, 0.828	0.357
		0-23	13.7	199	0.430	-0.110, 0.969	0.117
		0-47	11.3	199	0.252	-0.241, 0.746	0.314
		0-71	11.0	198	0.362	-0.153, 0.877	0.167
		0-95	10.3	198	0.384	-0.160, 0.928	0.164
	PM _{2.5} (ug/m ³)	0	5.9	188	0.132	-0.239, 0.504	0.482
		0-2	5.8	181	0.122	-0.284, 0.528	0.552
		0-11	5.4	191	0.077	-0.295, 0.450	0.681
		0-23	4.9	192	0.095	-0.320, 0.510	0.651
		0-47	4.6	193	0.217	-0.195, 0.628	0.298
		0-71	4.7	194	0.204	-0.240, 0.649	0.364
		0-95	4.3	194	0.194	-0.231, 0.618	0.368
	CO (ppm)	0	0.1	192	0.269	-0.261, 0.800	0.317
		0-2	0.1	187	0.369	-0.200, 0.938	0.202
		0-11	0.1	193	0.047	-0.359, 0.454	0.819
		0-23	0.1	195	0.135	-0.302, 0.572	0.542
		0-47	0.1	195	0.299	-0.131, 0.728	0.171
		0-71	0.1	195	0.200	-0.249, 0.648	0.380
		0-95	0.1	194	0.190	-0.292, 0.672	0.436
	NO ₂ (ppb)	0	4.6	184	0.081	-0.173, 0.334	0.529
		0-2	5.5	179	0.055	-0.287, 0.398	0.749
		0-11	7.9	185	0.018	-0.381, 0.417	0.929
		0-23	6.1	187	0.068	-0.313, 0.449	0.724
		0-47	5.1	187	0.190	-0.184, 0.563	0.317
		0-71	5.2	186	0.183	-0.224, 0.591	0.375
		0-95	4.2	185	0.127	-0.211, 0.465	0.458
	SO ₂ (ppb)	0	0.8	120	0.206	-0.084, 0.497	0.160
		0-2	0.9	119	0.089	-0.193, 0.371	0.529
		0-11	0.8	121	0.169	-0.126, 0.465	0.256
		0-23	0.9	123	0.142	-0.211, 0.494	0.427
		0-47	0.9	124	0.241	-0.169, 0.650	0.245

Flow
mediated
dilation
(%)

		0-71	0.9	124	0.307	-0.280, 0.895	0.300
		0-95	0.9	123	0.511	-0.123, 1.146	0.112
	PES						
	O ₃ (ppb)	0-71	4.1	241	0.068	-0.075, 0.211	0.347
	PES						
	NO ₂ (ppb)	0-71	9.3	241	-0.034	-0.146, 0.079	0.556
		0	15.2	223	0.020	-0.153, 0.192	0.821
		0-2	15.2	211	-0.050	-0.234, 0.134	0.593
	O ₃ (ppb)	0-11	16.1	227	-0.184	-0.362, -0.005	0.043
		0-23	13.7	230	-0.135	-0.304, 0.034	0.117
		0-47	11.3	231	-0.087	-0.251, 0.077	0.294
		0-71	11.0	230	-0.105	-0.278, 0.068	0.232
		0-95	10.3	231	-0.059	-0.241, 0.123	0.522
		0	5.9	219	0.142	0.031, 0.252	0.012
		0-2	5.8	212	0.175	0.059, 0.290	0.003
	PM _{2.5} (ug/m ³)	0-11	5.4	222	0.141	0.033, 0.249	0.011
		0-23	4.9	223	0.118	-0.005, 0.241	0.060
		0-47	4.6	224	0.111	-0.021, 0.243	0.099
		0-71	4.7	225	0.105	-0.042, 0.252	0.162
		0-95	4.3	224	0.052	-0.092, 0.196	0.474
		0	0.1	223	0.156	-0.027, 0.339	0.095
		0-2	0.1	218	0.210	0.009, 0.411	0.041
	CO (ppm)	0-11	0.1	224	0.189	0.055, 0.324	0.006
		0-23	0.1	226	0.202	0.057, 0.347	0.007
		0-47	0.1	226	0.188	0.043, 0.333	0.011
		0-71	0.1	226	0.192	0.041, 0.343	0.013
		0-95	0.1	225	0.185	0.016, 0.353	0.032
		0	4.6	215	0.020	-0.072, 0.112	0.673
		0-2	5.5	210	0.081	-0.045, 0.208	0.205
	NO ₂ (ppb)	0-11	7.9	217	0.15	0.016, 0.283	0.028
		0-23	6.1	220	0.135	0.008, 0.262	0.038
		0-47	5.1	220	0.128	0.002, 0.254	0.046
		0-71	5.2	219	0.165	0.027, 0.302	0.019
		0-95	4.2	218	0.117	0.000, 0.234	0.050
		0	0.8	144	-0.004	-0.105, 0.098	0.942
		0-2	0.9	143	-0.020	-0.102, 0.061	0.617
	SO ₂ (ppb)	0-11	0.8	145	-0.055	-0.169, 0.060	0.344
		0-23	0.9	147	-0.024	-0.158, 0.111	0.726
		0-47	0.9	148	-0.021	-0.173, 0.131	0.784
		0-71	0.9	148	-0.005	-0.212, 0.202	0.961
		0-95	0.9	147	0.047	-0.179, 0.273	0.682
	PES						
	O ₃ (ppb)	0-71	4.1	241	0.034	-0.035, 0.102	0.333
	PES						
	NO ₂ (ppb)	0-71	9.3	241	0.012	-0.041, 0.065	0.655
		0	15.2	223	0.047	-0.033, 0.127	0.246
	O ₃ (ppb)	0-2	15.2	211	0.075	-0.012, 0.162	0.090
Ln of C-reactive protein (mg/L)							
Ln of Nitrotyrosine (nM)							

		0-11	16.1	227	0.092	0.009, 0.176	0.030
		0-23	13.7	230	0.050	-0.030, 0.129	0.220
		0-47	11.3	231	0.009	-0.068, 0.085	0.825
		0-71	11.0	230	0.032	-0.049, 0.112	0.437
		0-95	10.3	231	0.027	-0.056, 0.110	0.527
	PM _{2.5} (ug/m ³)	0	5.9	219	-0.035	-0.088, 0.017	0.182
		0-2	5.8	212	-0.060	-0.114, -0.005	0.033
		0-11	5.4	222	-0.048	-0.097, 0.001	0.056
		0-23	4.9	223	-0.053	-0.109, 0.004	0.067
		0-47	4.6	224	-0.048	-0.108, 0.012	0.118
		0-71	4.7	225	-0.017	-0.083, 0.050	0.622
		0-95	4.3	224	0.003	-0.061, 0.067	0.920
	CO (ppm)	0	0.1	223	-0.050	-0.136, 0.037	0.257
		0-2	0.1	218	-0.070	-0.167, 0.027	0.155
		0-11	0.1	224	-0.020	-0.084, 0.045	0.554
		0-23	0.1	226	-0.028	-0.098, 0.043	0.437
		0-47	0.1	226	-0.025	-0.095, 0.044	0.474
		0-71	0.1	226	-0.027	-0.099, 0.045	0.456
		0-95	0.1	225	-0.017	-0.096, 0.061	0.664
	NO ₂ (ppb)	0	4.6	215	-0.039	-0.080, 0.002	0.064
		0-2	5.5	210	-0.066	-0.124, -0.009	0.025
		0-11	7.9	217	-0.074	-0.135, -0.013	0.018
		0-23	6.1	220	-0.067	-0.125, -0.008	0.027
		0-47	5.1	220	-0.057	-0.114, 0.001	0.055
		0-71	5.2	219	-0.063	-0.126, 0.000	0.051
		0-95	4.2	218	-0.037	-0.091, 0.016	0.172
	SO ₂ (ppb)	0	0.8	144	-0.004	-0.059, 0.052	0.895
		0-2	0.9	143	0.000	-0.045, 0.044	0.993
		0-11	0.8	145	0.024	-0.036, 0.083	0.431
		0-23	0.9	147	0.015	-0.055, 0.086	0.666
		0-47	0.9	148	0.021	-0.058, 0.099	0.598
		0-71	0.9	148	0.053	-0.053, 0.159	0.322
		0-95	0.9	147	0.067	-0.048, 0.182	0.251
	PES O ₃ (ppb)	0-71	4.1	240	0.021	-0.008, 0.049	0.157
	PES NO ₂ (ppb)	0-71	9.3	240	0.009	-0.015, 0.032	0.473
Microparticle TFA (pg/mL)	O ₃ (ppb)	0	15.2	222	0.001	-0.035, 0.036	0.967
		0-2	15.2	210	-0.001	-0.038, 0.036	0.949
		0-11	16.1	226	0.011	-0.029, 0.051	0.602
		0-23	13.7	229	-0.006	-0.044, 0.032	0.744
		0-47	11.3	230	-0.021	-0.057, 0.015	0.254
		0-71	11.0	229	-0.032	-0.070, 0.005	0.089
		0-95	10.3	230	-0.032	-0.071, 0.006	0.095
	PM _{2.5} (ug/m ³)	0	5.9	218	-0.005	-0.028, 0.018	0.679
		0-2	5.8	211	-0.005	-0.029, 0.019	0.695
		0-11	5.4	221	-0.016	-0.039, 0.007	0.177
		0-23	4.9	222	-0.020	-0.046, 0.007	0.143
		0-47	4.6	223	-0.024	-0.052, 0.004	0.097

		0-71	4.7	224	-0.026	-0.058, 0.006	0.107
		0-95	4.3	223	-0.026	-0.056, 0.005	0.097
	CO (ppm)	0	0.1	222	-0.018	-0.053, 0.018	0.322
		0-2	0.1	217	-0.023	-0.062, 0.016	0.239
		0-11	0.1	223	-0.016	-0.044, 0.013	0.282
		0-23	0.1	225	-0.016	-0.047, 0.015	0.315
		0-47	0.1	225	-0.011	-0.041, 0.019	0.480
		0-71	0.1	225	-0.005	-0.036, 0.026	0.745
		0-95	0.1	224	-0.004	-0.037, 0.029	0.816
		NO ₂ (ppb)	0	4.6	214	-0.017	-0.034, 0.001
	0-2		5.5	209	-0.019	-0.043, 0.005	0.116
	0-11		7.9	216	-0.011	-0.037, 0.016	0.432
	0-23		6.1	219	-0.013	-0.039, 0.012	0.292
	0-47		5.1	219	-0.015	-0.040, 0.009	0.211
	0-71		5.2	218	-0.008	-0.034, 0.018	0.550
	0-95		4.2	217	-0.007	-0.029, 0.015	0.522
	SO ₂ (ppb)		0	0.8	145	-0.010	-0.033, 0.013
		0-2	0.9	144	-0.008	-0.025, 0.010	0.400
		0-11	0.8	146	-0.013	-0.040, 0.013	0.310
		0-23	0.9	148	-0.016	-0.048, 0.015	0.311
		0-47	0.9	148	-0.020	-0.057, 0.018	0.296
		0-71	0.9	148	-0.031	-0.082, 0.020	0.230
		0-95	0.9	147	-0.013	-0.068, 0.042	0.647
		PES O ₃ (ppb)	0-71	4.1	214	-0.092	-0.196, 0.011
	PES NO ₂ (ppb)	0-71	9.3	214	-0.053	-0.135, 0.029	0.200
Ln of Monocyte platelet conjugates (count)	O ₃ (ppb)	0	15.2	197	0.026	-0.102, 0.154	0.684
		0-2	15.2	188	0.058	-0.078, 0.194	0.399
		0-11	16.1	204	0.026	-0.113, 0.166	0.709
		0-23	13.7	206	0.04	-0.091, 0.172	0.546
		0-47	11.3	206	0.067	-0.056, 0.189	0.282
		0-71	11.0	205	0.056	-0.074, 0.187	0.394
		0-95	10.3	205	0.047	-0.086, 0.181	0.483
		PM _{2.5} (ug/m ³)	0	5.9	198	0.036	-0.048, 0.120
	0-2		5.8	193	0.008	-0.079, 0.095	0.854
	0-11		5.4	201	-0.007	-0.092, 0.078	0.874
	0-23		4.9	201	-0.014	-0.111, 0.083	0.772
	0-47		4.6	202	-0.003	-0.106, 0.100	0.956
	0-71		4.7	203	-0.01	-0.122, 0.102	0.863
	0-95		4.3	202	0.019	-0.088, 0.126	0.728
	CO (ppm)		0	0.1	196	0.081	-0.056, 0.217
		0-2	0.1	193	0.034	-0.117, 0.185	0.656
		0-11	0.1	199	0.017	-0.090, 0.123	0.753
		0-23	0.1	200	0.009	-0.106, 0.124	0.877
		0-47	0.1	200	0.011	-0.099, 0.121	0.848
		0-71	0.1	200	0.025	-0.091, 0.140	0.676
0-95		0.1	199	0.031	-0.093, 0.154	0.626	
NO ₂		0	4.6	191	-0.001	-0.065, 0.063	0.973

FEV ₁ (L)	(ppb)	0-2	5.5	188	-0.030	-0.120, 0.060	0.513
		0-11	7.9	195	-0.017	-0.115, 0.082	0.738
		0-23	6.1	197	-0.025	-0.119, 0.068	0.595
		0-47	5.1	197	-0.024	-0.114, 0.066	0.597
		0-71	5.2	197	-0.023	-0.121, 0.075	0.638
		0-95	4.2	196	-0.012	-0.094, 0.069	0.766
		0	0.8	128	-0.023	-0.096, 0.050	0.531
	SO ₂ (ppb)	0-2	0.9	127	-0.010	-0.066, 0.046	0.721
		0-11	0.8	130	-0.008	-0.086, 0.070	0.843
		0-23	0.9	131	0.018	-0.078, 0.114	0.711
		0-47	0.9	132	0.024	-0.085, 0.134	0.659
		0-71	0.9	132	0.029	-0.120, 0.178	0.701
		0-95	0.9	131	0.050	-0.111, 0.212	0.536
		0	0.8	128	-0.023	-0.096, 0.050	0.531
	PES O ₃ (ppb)	0-71	4.1	245	-0.001	-0.022, 0.020	0.936
	PES NO ₂ (ppb)	0-71	9.3	245	0.001	-0.016, 0.017	0.950
	O ₃ (ppb)	0	15.2	227	0.017	-0.007, 0.041	0.165
		0-2	15.2	215	0.013	-0.012, 0.038	0.309
		0-11	16.1	231	0.004	-0.021, 0.030	0.732
		0-23	13.7	234	0.008	-0.016, 0.032	0.518
		0-47	11.3	235	0.012	-0.011, 0.034	0.316
		0-71	11.0	234	0.020	-0.004, 0.044	0.095
		0-95	10.3	235	0.025	0.000, 0.051	0.051
	PM _{2.5} (ug/m ³)	0	5.9	223	-0.023	-0.039, -0.008	0.004
		0-2	5.8	216	-0.023	-0.039, -0.006	0.009
		0-11	5.4	226	-0.020	-0.035, -0.004	0.015
		0-23	4.9	227	-0.020	-0.038, -0.002	0.032
0-47		4.6	228	-0.021	-0.040, -0.001	0.036	
0-71		4.7	229	-0.020	-0.041, 0.001	0.067	
0-95		4.3	228	-0.015	-0.035, 0.006	0.156	
CO (ppm)	0	0.1	227	-0.036	-0.062, -0.011	0.006	
	0-2	0.1	222	-0.036	-0.065, -0.007	0.014	
	0-11	0.1	228	-0.013	-0.033, 0.006	0.184	
	0-23	0.1	230	-0.024	-0.045, -0.002	0.031	
	0-47	0.1	230	-0.027	-0.048, -0.006	0.014	
	0-71	0.1	230	-0.025	-0.047, -0.003	0.028	
	0-95	0.1	229	-0.029	-0.053, -0.005	0.020	
NO ₂ (ppb)	0	4.6	218	-0.009	-0.021, 0.004	0.169	
	0-2	5.5	213	-0.012	-0.029, 0.005	0.174	
	0-11	7.9	220	-0.002	-0.020, 0.016	0.834	
	0-23	6.1	223	-0.013	-0.031, 0.005	0.159	
	0-47	5.1	223	-0.02	-0.038, -0.003	0.025	
	0-71	5.2	222	-0.03	-0.049, -0.011	0.002	
	0-95	4.2	221	-0.026	-0.043, -0.010	0.002	
SO ₂ (ppb)	0	0.8	148	0.005	-0.009, 0.020	0.454	
	0-2	0.9	147	0.000	-0.012, 0.012	0.958	
	0-11	0.8	149	0.004	-0.012, 0.021	0.611	
	0-23	0.9	151	-0.002	-0.021, 0.018	0.846	

		0-47	0.9	152	-0.003	-0.025, 0.019	0.770
		0-71	0.9	152	-0.005	-0.035, 0.024	0.721
		0-95	0.9	151	-0.001	-0.034, 0.031	0.933
	PES						
	O ₃ (ppb)	0-71	4.1	245	0.004	-0.020, 0.027	0.746
	PES						
	NO ₂ (ppb)	0-71	9.3	245	0.001	-0.017, 0.019	0.937
		0	15.2	227	0.017	-0.010, 0.044	0.221
		0-2	15.2	215	0.013	-0.016, 0.042	0.375
	O ₃ (ppb)	0-11	16.1	231	0.002	-0.026, 0.031	0.882
		0-23	13.7	234	0.012	-0.015, 0.039	0.395
		0-47	11.3	235	0.015	-0.010, 0.041	0.243
		0-71	11.0	234	0.019	-0.008, 0.046	0.170
		0-95	10.3	235	0.022	-0.006, 0.051	0.121
		0	5.9	223	-0.022	-0.040, -0.004	0.016
		0-2	5.8	216	-0.021	-0.040, -0.001	0.037
	PM _{2.5} (ug/m ³)	0-11	5.4	226	-0.021	-0.039, -0.004	0.017
		0-23	4.9	227	-0.023	-0.043, -0.003	0.026
		0-47	4.6	228	-0.023	-0.044, -0.001	0.040
		0-71	4.7	229	-0.024	-0.048, 0.000	0.051
		0-95	4.3	228	-0.017	-0.040, 0.006	0.154
		0	0.1	227	-0.031	-0.061, -0.002	0.034
		0-2	0.1	222	-0.028	-0.061, 0.004	0.084
	CO (ppm)	0-11	0.1	228	-0.012	-0.034, 0.010	0.290
		0-23	0.1	230	-0.026	-0.050, -0.002	0.035
		0-47	0.1	230	-0.029	-0.052, -0.005	0.019
		0-71	0.1	230	-0.026	-0.051, -0.001	0.043
		0-95	0.1	229	-0.029	-0.056, -0.002	0.036
		0	4.6	218	-0.007	-0.021, 0.007	0.317
		0-2	5.5	213	-0.010	-0.029, 0.009	0.316
	NO ₂ (ppb)	0-11	7.9	220	-0.003	-0.023, 0.017	0.780
		0-23	6.1	223	-0.020	-0.040, 0.000	0.047
		0-47	5.1	223	-0.027	-0.046, -0.007	0.008
		0-71	5.2	222	-0.035	-0.057, -0.014	0.001
		0-95	4.2	221	-0.030	-0.048, -0.012	0.001
		0	0.8	148	0.012	-0.002, 0.027	0.093
		0-2	0.9	147	0.005	-0.007, 0.018	0.379
	SO ₂ (ppb)	0-11	0.8	149	0.012	-0.006, 0.029	0.182
		0-23	0.9	151	0.003	-0.017, 0.024	0.750
		0-47	0.9	152	-0.002	-0.025, 0.021	0.873
		0-71	0.9	152	-0.002	-0.033, 0.029	0.902
		0-95	0.9	151	0.003	-0.031, 0.037	0.870
	PES						
	O ₃ (ppb)	0-71	4.1	241	-0.02	-0.073, 0.033	0.456
	PES						
	NO ₂ (ppb)	0-71	9.3	241	0.010	-0.031, 0.051	0.618
		0	15.2	223	-0.001	-0.064, 0.062	0.970

(ppb)	0-2	15.2	211	-0.006	-0.074, 0.062	0.863
	0-11	16.1	227	-0.029	-0.095, 0.037	0.388
	0-23	13.7	230	-0.040	-0.103, 0.023	0.212
	0-47	11.3	231	-0.026	-0.087, 0.034	0.396
	0-71	11.0	230	-0.036	-0.099, 0.028	0.270
	0-95	10.3	231	-0.030	-0.096, 0.036	0.373
	PM _{2.5} (ug/m ³)	0	5.9	219	0.025	-0.013, 0.062
0-2		5.8	212	0.025	-0.016, 0.065	0.227
0-11		5.4	222	0.026	-0.013, 0.066	0.190
0-23		4.9	223	0.014	-0.031, 0.060	0.529
0-47		4.6	224	0.011	-0.038, 0.059	0.665
0-71		4.7	225	0.016	-0.037, 0.069	0.555
0-95		4.3	224	0.023	-0.028, 0.074	0.370
CO (ppm)	0	0.1	223	0.097	0.031, 0.163	0.004
	0-2	0.1	218	0.077	0.002, 0.152	0.044
	0-11	0.1	224	0.034	-0.016, 0.084	0.182
	0-23	0.1	226	0.056	0.001, 0.110	0.045
	0-47	0.1	226	0.050	-0.004, 0.105	0.069
	0-71	0.1	226	0.055	-0.001, 0.112	0.056
	0-95	0.1	225	0.063	0.001, 0.124	0.047
NO ₂ (ppb)	0	4.6	215	0.000	-0.034, 0.033	0.982
	0-2	5.5	210	0.004	-0.043, 0.050	0.873
	0-11	7.9	217	0.024	-0.025, 0.073	0.330
	0-23	6.1	220	0.037	-0.010, 0.084	0.125
	0-47	5.1	220	0.024	-0.023, 0.070	0.318
	0-71	5.2	219	0.035	-0.016, 0.086	0.175
	0-95	4.2	218	0.025	-0.019, 0.068	0.260
SO ₂ (ppb)	0	0.8	144	0.009	-0.024, 0.043	0.574
	0-2	0.9	143	0.006	-0.022, 0.033	0.682
	0-11	0.8	145	-0.011	-0.046, 0.024	0.530
	0-23	0.9	147	-0.01	-0.052, 0.032	0.641
	0-47	0.9	148	-0.012	-0.059, 0.036	0.628
	0-71	0.9	148	-0.027	-0.091, 0.037	0.403
	0-95	0.9	147	-0.009	-0.080, 0.062	0.800