Supplemental Table 4. Associations between air pollutant and liver enzyme levels in multi-day lag models[1]

	Lag day	AST			ALT			γ-GTP		
		Estimate	95% CI	*p*-value	Estimate	95% CI	*p*-value	Estimate	95% CI	*p*-value
PM₂.₅	1	0.0255	0.0007, 0.0503	0.04	-0.0005	-0.0315, 0.0305	0.97	0.0085	-0.0331, 0.0502	0.69
	2	0.0375	0.0096, 0.0654	0.008	0.015	-0.0199, 0.0499	0.40	0.0115	-0.0354, 0.0584	0.63
	3	0.0467	0.0174, 0.0760	0.002	0.0226	-0.0142, 0.0594	0.23	0.0348	-0.0147, 0.0842	0.17
	4	0.0448	0.0157, 0.0740	0.003	0.0208	-0.0157, 0.0573	0.26	0.0447	-0.0043, 0.0937	0.07
	5	0.04	0.0106, 0.0695	0.008	0.0175	-0.0195, 0.0544	0.35	0.0418	-0.0078, 0.0914	0.10
	6	0.0391	0.0082, 0.0700	0.01	0.0129	-0.0259, 0.0516	0.51	0.0298	-0.0222, 0.0819	0.26
NO₂	1	0.0275	-0.0001, 0.0550	0.05	-0.0102	-0.0445, 0.0240	0.56	-0.0164	-0.0620, 0.0293	0.48
	2	0.0443	0.0123, 0.0763	0.007	0.0116	-0.0283, 0.0515	0.57	-0.0083	-0.0614, 0.0449	0.76
	3	0.0557	0.0196, 0.0919	0.002	0.0264	-0.0186, 0.0714	0.25	0.0055	-0.0545, 0.0656	0.86
	4	0.0532	0.0146, 0.0918	0.007	0.0239	-0.0243, 0.0720	0.33	0.0085	-0.0557, 0.0727	0.79
	5	0.0498	0.0085, 0.0911	0.02	0.0081	-0.0433, 0.0595	0.76	0.0024	-0.0662, 0.0709	0.94
	6	0.0541	0.0108, 0.0974	0.01	0.0016	-0.0523, 0.0556	0.95	-0.0012	-0.0731, 0.0707	0.97
O₃	1	0.0099	-0.0362, 0.056	0.67	0.0039	-0.0539, 0.0616	0.89	0.0048	-0.0729, 0.0824	0.90
	2	0.0231	-0.0286, 0.0749	0.38	0.0174	-0.0473, 0.0822	0.60	0.0037	-0.0834, 0.0908	0.93
	3	0.0281	-0.0254, 0.0816	0.30	0.0293	-0.0377, 0.0962	0.39	0.0381	-0.0520, 0.1282	0.41
	4	0.0342	-0.0201, 0.0885	0.22	0.0368	-0.0311, 0.1048	0.29	0.0698	-0.0216, 0.1612	0.13
	5	0.0334	-0.0221, 0.0911	0.23	0.0504	-0.0205, 0.1212	0.16	0.0813	-0.0140, 0.1765	0.09
	6	0.0323	-0.0286, 0.0931	0.30	0.0574	-0.0186, 0.1335	0.14	0.1003	-0.0020, 0.2026	0.05
CO	1	-0.0001	-0.0237, 0.0235	0.99	-0.0114	-0.0410, 0.0181	0.45	-0.0037	-0.0435, 0.0361	0.85
	2	0.0055	-0.0223, 0.0333	0.70	0.0039	-0.0309, 0.0387	0.82	-0.0101	-0.0569, 0.0368	0.67
	3	0.0085	-0.0240, 0.0409	0.61	0.0128	-0.0278, 0.0534	0.54	-0.0092	-0.0638, 0.0455	0.74
	4	0.0067	-0.0281, 0.0414	0.71	0.0028	-0.0406, 0.0463	0.90	-0.0166	-0.0750, 0.0419	0.58
	5	0.0048	-0.0323, 0.0419	0.80	-0.0040	-0.0504, 0.0425	0.87	-0.0198	-0.0823, 0.0427	0.53
	6	0.0089	-0.0305, 0.0483	0.66	-0.0028	-0.0521, 0.0465	0.91	-0.0213	-0.0876, 0.0450	0.53
SO₂	1	0.0107	-0.0173, 0.0387	0.45	-0.0103	-0.0451, 0.0244	0.56	-0.0185	-0.0648, 0.0278	0.43
	2	0.0153	-0.0153, 0.0484	0.33	-0.0037	-0.0417, 0.0343	0.85	-0.0298	-0.0805, 0.0208	0.25
	3	0.021	-0.0116, 0.0535	0.21	-0.0032	-0.0437, 0.0373	0.88	-0.0244	-0.0783, 0.0286	0.37
	4	0.0244	-0.0096, 0.0584	0.16	0.0028	-0.0394, 0.0451	0.89	-0.0138	-0.0701, 0.0425	0.63
	5	0.0224	-0.0137, 0.0586	0.22	-0.0037	-0.0486, 0.0412	0.87	-0.0086	-0.0685, 0.0512	0.78
	6	0.0217	-0.0163, 0.0598	0.26	-0.0098	-0.0571, 0.0375	0.68	-0.0090	-0.0720, 0.0540	0.78

AST, aspartate aminotransferase; ALT, alanine aminotransferase; γ-GTP, γ-glutamyltranspeptidase; CI, confidence interval; PM₂.₅, particulate matter ≤2.5 μm; NO₂, nitrogen dioxide; O₃, ozone; CO, carbon monoxide; SO₂, sulfur dioxide.

[1]Changes in liver enzyme levels by an interquartile range increase in the concentrations of air pollutants were estimated using a linear mixed model after adjusting for age, sex, smoking status, mean temperature, dew point, season, body mass index, alcohol consumption, and amount of exercise.