SUPPLEMENTAL MATETRIAL

Table S-1. Association of inflammatory markers [change (95%CI)] with an interquartile range (IQR) increase of **12-hr lagged exposure** of particulate air pollutants in the U.S. trucking industry [a]

			EC [b]				OC [c]				$PM_{2.5}$ [d]			
Outcome	Exposure		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
Inflam. Marker	Lag period	n	Change	(95%CI)	Change	(95%CI)	Change	(95%CI)	Change	(95%CI)	Change	(95% CI)	Change	(95% CI)
CRP	Lag_{0-12}	136	0.19	(-0.44 to 0.82)	0.02	(-0.48 to 0.51)	0.79	(-0.73 to 2.30)	0.57	(-0.66 to 1.82)	0.73	(-0.90 to 2.36)	0.63	(-0.82 to 2.07)
(mg/L)	Lag_{12-24}	119	-0.64	(-1.83 to 0.55)	-0.28	(-0.94 to 0.38)	-1.18	(-3.20 to 0.84)	-0.62	(-1.84 to 0.60)	-0.96	(-2.47 to 0.55)	-0.68	(-1.78 to 0.41)
	Lag_{24-36}	96	-0.09	(-0.54 to 0.36)	-0.63	(-1.81 to 0.56)	-0.18	(-1.08 to 0.72)	-0.80	(-2.55 to 0.96)	0.12	(-0.49 to 0.72)	-0.32	(-1.33 to 0.70)
	Lag_{36-48}	72	-0.21	(-0.69 to 0.27)	-0.03	(-0.45 to 0.40)	-0.99	(-2.90 to 0.92)	-0.36	(-1.58 to 0.85)	-0.46	(-1.50 to 0.59)	-0.14	(-1.05 to 0.77)
IL-6	Lag_{0-12}	136	0.34	(-0.12 to 0.80)	0.23	(-0.17 to 0.62)	0.70	(-0.08 to 1.48)	0.55	(-0.14 to 1.23)	0.21	(-0.50 to 0.91)	0.14	(-0.49 to 0.76)
(pg/mL)	Lag_{12-24}	119	-0.65	(-1.39 to 0.09)	-0.44	(-1.00 to 0.12)	-0.42	(-1.52 to 0.69)	0.00	(-0.86 to 0.85)	-0.55	(-1.39 to 0.30)	-0.32	(-0.97 to 0.33)
	Lag_{24-36}	96	0.13	(-0.21 to 0.47)	-0.17	(-0.74 to 0.40)	0.72	(-0.05 to 1.50)	0.43	(-0.56 to 1.42)	0.63	(-0.03 to 1.29)	0.38	(-0.35 to 1.11)
	Lag_{36-48}	72	-0.40	(-0.85 to 0.04)	-0.32	(-0.76 to 0.13)	-1.09	(-2.25 to 0.06)	-0.90	(-1.90 to 0.10)	-0.66	(-1.39 to 0.07)	-0.51	(-1.15 to 0.12)
sICAM-1	Lag_{0-12}	136	-2.63	(-16.7 to 11.5)	-3.48	(-16.1 to 9.2)	-4.48	(-24.3 to 15.4)	-5.44	(-25.1 to 14.2)	-9.19	(-20.7 to 2.3)	-9.11	(-20.2 to 2.0)
(ng/mL)	Lag_{12-24}	119	1.56	(-12.5 to 15.6)	-1.26	(-15.5 to 12.9)	**16.6**	**(-5.2 to 38.4)**	**14.2**	**(-7.5 to 35.9)**	1.93	(-16.2 to 20.1)	0.71	(-16.9 to 18.4)
	Lag_{24-36}	96	4.72	(-6.6 to 16.0)	9.24	(-0.9 to 19.4)	**18.7**	**(-4.7 to 42.2)**	**22.9**	**(1.2 to 44.6)**	5.81	(-13.5 to 25.1)	8.97	(-9.7 to 27.7)
	Lag_{36-48}	72	-7.93	(-18.6 to 2.7)	-8.86	(-17.8 to 0.1)	-2.74	(-33 to 27.5)	-11.3	(-40.5 to 18)	-7.92	(-27.9 to 12.1)	-10.1	(-28.7 to 8.4)

[a] Linear regression model using robust variance; Each 12-hr lagged exposure level was included in separate models (i.e., each model included only one 12-hr lagged exposure variable).
Model 1 adjusted for age (quartile), race, sex, obesity (BMI≥30), exercise (>2hrs/wk), smoking status, secondhand smoke exposure in the past 24 hrs, and cholesterol drug use.
Model 2 additionally adjusted for recent illness, time of blood draw, high blood pressure, chronic pulmonary illness, and hey fever.

[b] Corresponds to an IQR increase of Lag_{0-12} EC: 0.16 $\mu g/m^3$

[c] Corresponds to an IQR increase of Lag_{0-12} OC: 3.47 $\mu g/m^3$

[d] Corresponds to an IQR increase of Lag_{0-12} $PM_{2.5}$: 6.85 $\mu g/m^3$

Table S-2. Association of inflammatory markers [change (95%CI)] with an interquartile range (IQR) increase of **24-hr and 48-hr moving averages** of particulate air pollutants in the U.S. trucking industry [a]

Inflam.	Exposure		EC [b]		OC [c]		$PM_{2.5}$ [d]	
Marker	Lag period	n	Change	(95%CI)	Change	(95%CI)	Change	(95% CI)
CRP	0-24 hrs	119	-0.57	(-1.98 to 0.83)	-0.18	(-1.56 to 1.21)	1.01	(-1.68 to 3.71)
(mg/L)	12-36 hrs	110	-0.90	(-2.65 to 0.84)	-3.05	(-9.14 to 3.04)	-1.68	(-4.67 to 1.32)
	24-48 hrs	72	-0.55	(-1.57 to 0.47)	-3.31	(-8.66 to 2.04)	-1.11	(-3.6 0to 1.38)
	0-48 hrs	72	-1.17	(-3.31 to 0.96)	-3.03	(-7.61 to 1.55)	-0.01	(-2.07 to 2.06)
IL-6	0-24 hrs	119	-0.26	(-1.11 to 0.59)	1.38	(-0.07 to 2.83)	0.17	(-1.23 to 1.58)
(pg/mL)	12-36 hrs	110	-0.42	(-1.41 to 0.57)	0.84	(-2.00 to 3.68)	0.17	(-1.52 to 1.85)
	24-48 hrs	72	-0.47	(-1.05 to 0.11)	-1.55	(-4.08 to 0.98)	-0.56	(-1.80 to 0.68)
	0-48 hrs	72	-0.64	(-1.69 to 0.41)	-0.76	(-3.15 to 1.64)	0.19	(-1.22 to 1.60)
sICAM-1	0-24 hrs	119	-3.8	(-30.0 to 22.3)	18.7	(-30.2 to 67.6)	-27.2	(-59.5 to 5.1)
(ng/mL)	12-36 hrs	110	12.1	(-7.1 to 31.3)	**75.7**	**(33.5 to 117.9)**	13.3	(-17.7 to 44.2)
	24-48 hrs	72	-1.3	(-22.5 to 19.9)	50.5	(-12.2 to 113.1)	2.9	(-42.2 to 47.9)
	0-48 hrs	72	3.4	(-29.7 to 36.6)	**77.2**	**(11.3 to 143.0)**	1.1	(-55.9 to 58.1)

[a] Linear regression model using robust variance; adjusted for age (quartile), race, sex, obesity (BMI≥30), exercise (>2hrs/wk), smoking status, secondhand smoke exposure in the past 24 hrs, and cholesterol drug use.

[b] Corresponds to an IQR increase of $Lag_{0\text{-}12}$ EC: 0.16 µg/m^3

[c] Corresponds to an IQR increase of $Lag_{0\text{-}12}$ OC: 3.47 µg/m^3

[d] Corresponds to an IQR increase of $Lag_{0\text{-}12}$ $PM_{2.5}$: 6.85 µg/m^3

Table S-3. Results from **multiple-lag models** examining association of inflammatory markers [change (95%CI)] with an interquartile range increase of air pollutants in the U.S. trucking industry [a]

Inflam.	Exposure	EC [b]		OC [c]		$PM_{2.5}$ [d]	
Marker	Period	Change	(95%CI)	Change	(95%CI)	Change	(95% CI)
CRP	Lag_{0-12}	-1.37	(-3.48, 0.75)	-1.23	(-3.87, 1.41)	-0.24	(-1.61, 1.13)
(mg/L)	Lag_{12-24}	1.09	(-0.57, 2.74)	0.82	(-1.90, 3.54)	1.82	(-1.20, 4.84)
	Lag_{24-36}	-0.81	(-2.23, 0.6)	-3.05	(-8.23, 2.13)	-2.91	(-8.02, 2.20)
	Lag_{36-48}	0.61	(-0.76, 1.98)	1.70	(-1.62, 5.02)	1.30	(-1.26, 3.86)
	Work hour before blood draw	1.37	(-0.76, 3.49)	1.57	(-0.89, 4.03)	1.60	(-0.96, 4.15)
IL-6	Lag_{0-12}	-0.29	(-1.22, 0.64)	-0.65	(-2.02, 0.71)	-0.40	(-1.16, 0.37)
(pg/mL)	Lag_{12-24}	0.64	(-0.56, 1.85)	2.40	(-0.10, 4.90)	2.04	(-0.04, 4.13)
	Lag_{24-36}	-0.17	(-0.76, 0.43)	-0.54	(-2.74, 1.65)	-0.40	(-2.57, 1.76)
	Lag_{36-48}	-0.03	(-0.82, 0.76)	-0.92	(-3.64, 1.80)	-0.07	(-1.46, 1.31)
	Work hour before blood draw	0.51	(-0.40, 1.41)	0.74	(-0.34, 1.81)	0.83	(-0.33, 1.98)
sICAM-1	Lag_{0-12}	-0.10	(-12.61, 12.41)	-2.19	(-40.43, 36.06)	-13.73	(-36.36, 8.90)
(ng/mL)	Lag_{12-24}	**27.92**	**(0.06, 55.9)**	**57.77**	**(12.20, 103.40)**	30.15	(-12.54, 72.83)
	Lag_{24-36}	**11.91**	**(0.95, 22.9)**	**45.71**	**(19.43, 71.99)**	25.57	(-4.28, 55.41)
	Lag_{36-48}	-12.96	(-29.46, 3.55)	-15.01	(-65.87, 35.85)	-13.27	(-39.12, 12.58)
	Work hour before blood draw	1.51	(-9.16, 12.18)	1.77	(-11.84, 15.37)	3.40	(-12.97, 19.76)

[a] Linear regression model using robust variance; adjusted for duration of work before blood draw, age (quartile), race, sex, obesity (BMI≥30 kg/m^2), exercise (>2hrs/wk), smoking status, secondhand smoke exposure in the past 24 hrs, and cholesterol drug use.

[b] Corresponds to an IQR increase of Lag_{0-12} EC: 0.16 $\mu g/m^3$

[c] Corresponds to an IQR increase of Lag_{0-12} OC: 3.47 $\mu g/m^3$

[d] Corresponds to an IQR increase of Lag_{0-12} $PM_{2.5}$: 6.85 $\mu g/m^3$

Table S-4. Associations between **un-weighted exposure levels measured by area samplers operating during a worker's work shift on the day of blood draw** and inflammatory markers [change (95%CI)] [a]

Inflam.	EC [b]		OC [c]		$PM_{2.5}$ [d]	
Marker	Change	(95%CI)	Change	(95%CI)	Change	(95% CI)
CRP (mg/L)	-0.26	(-0.73, 0.21)	-0.08	(-0.78, 0.61)	0.21	(-0.61, 1.04)
IL-6 (pg/mL)	0.02	(-0.25, 0.3)	0.51	(-0.15, 1.16)	-0.21	(-0.67, 0.25)
sICAM-1 (ng/mL)	-5.44	(-13.3, 2.41)	-1.22	(-23.8, 21.4)	-7.95	(-19.4, 3.56)

[a] Linear regression model using robust variance; adjusted for duration at work before blood draw, age (quartile), race, sex, obesity (BMI≥30 kg/m^2), exercise (>2hrs/wk), smoking status, secondhand smoke exposure in the past 24 hrs, and cholesterol drug use.

[b] Corresponds to an IQR increase of un-weighted area EC levels during work shift on the day of blood draw: 0.24 $\mu g/m^3$

[c] Corresponds to an IQR increase of un-weighted area OC levels during work shift on the day of blood draw: 5.65 $\mu g/m^3$

[d] Corresponds to an IQR increase of un-weighted area $PM_{2.5}$ levels during work shift on the day of blood draw: 10.45 $\mu g/m^3$