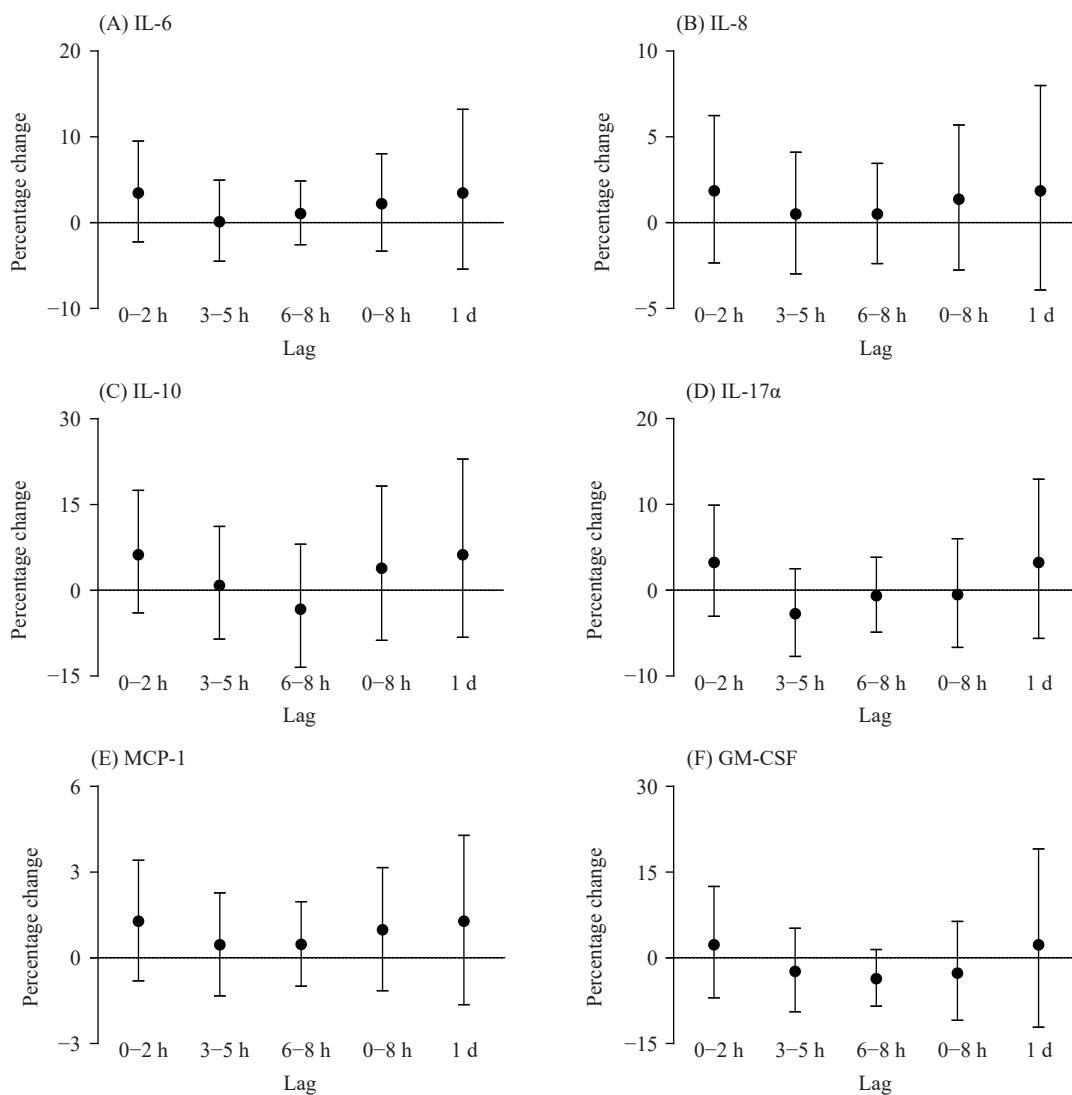


SUPPLEMENTARY TABLE S1. Descriptive statistics on personal ozone exposure during different periods preceding the blood sample collection in Shanghai Municipality, China, May–October 2016.

Lag	Mean	SD	P ₅	P ₂₅	Median	P ₇₅	P ₉₅
0–2 h	22.2	14.2	4.5	12.3	19.8	28.1	53.1
3–5 h	22.7	17.4	4.5	11.2	18.2	30.3	65.6
6–8 h	18.0	20.5	4.5	7.6	13.3	21.3	53.6
0–8 h	21.0	14.7	4.5	11.5	17.4	26.1	54.1
1 d	19.4	11.2	5.2	10.9	18.4	25.9	40.7
2 d	19.6	11.5	6.0	10.7	17.3	25.7	40.8

Abbreviations: SD=standard deviation; P₅=5th percentile; P₂₅=25th percentile; P₇₅=75th percentile; P₉₅=95th percentile.



SUPPLEMENTARY FIGURE S1. Percentage changes in IL-6 (A), IL-8 (B), IL-10 (C), IL-17 α (D), MCP-1 (E), and GM-CSF (F) associated with a 10-ppb increase in personal ozone exposure at different lag periods in 40 college students in Shanghai Municipality, China, May–October 2016.

Note: X-axis denotes to the different lag periods; Y-axis denotes the corresponding percentage change in biomarkers.

Abbreviations=IL-6=interleukin-6; IL-8=interleukin-8; IL-10=interleukin-10; IL-17 α =interleukin-17 alpha; MCP-1=monocyte chemoattractant protein-1; GM-CSF=granulocyte macrophage colony stimulating factor.

SUPPLEMENTARY TABLE S2. Percentage changes in biomarkers with a 10-ppb increase in personal ozone exposure* in 40 college students in Shanghai Municipality, China, May–October 2016, with adjustments of other air pollutants on the day of the blood sample collection.

Item	Ozone + PM _{2.5}	Ozone + SO ₂	Ozone + NO ₂	Ozone + CO
TNF-α	4.62 (0.82, 8.56)	4.07 (0.24, 8.05)	4.29 (0.32, 8.42)	4.75 (0.76, 8.90)
sICAM-1	3.21 (0.30, 6.20)	3.32 (0.35, 6.38)	3.06 (0.05, 6.16)	2.60 (-0.41, 5.69)
sVCAM-1	2.05 (-0.72, 4.91)	2.25 (-0.05, 4.59)	2.11 (-0.23, 4.50)	1.94 (-0.46, 4.40)
VEGF	10.57 (-0.10, 22.38)	10.89 (0.24, 22.63)	9.87 (-0.74, 21.60)	10.12 (-0.53, 21.90)
MDA	0.90 (0.09, 1.72)	0.88 (0.10, 1.66)	0.88 (0.09, 1.67)	0.87 (0.08, 1.65)
RMtDNAcn	30.51 (-3.77, 76.99)	31.45 (0.07, 72.66)	27.82 (-2.70, 67.92)	30.86 (-0.41, 71.94)
Methylation [†]	-0.24 (-0.48, 0.01)	-0.22 (-0.43, -0.01)	-0.24 (-0.45, -0.02)	-0.25 (-0.47, -0.04)

Abbreviations: TNF-α=tumor necrosis factor alpha; sICAM-1=soluble intercellular adhesionmolecule-1; sVCAM-1=soluble vascular cell adhesion molecule-1; VEGF=vascular endothelial growth factor; MDA=malonaldehyde; RMtDNAcn=relative mitochondrial DNA copy number; PM_{2.5}=ambient particulate matter with aerodynamic diameter less than 2.5 μm; SO₂=sulfur dioxide; NO₂=nitrogen dioxide; CO=carbon monoxide.

* Lag 3–5 hours for MDA and lag 0–2 hours for other biomarkers.

† Methylation levels of the D-loop region in mitochondrial DNA.