

**Table S1.** Descriptive characteristics among those missing and not missing urine samples.

	<b>Not missing urine sample (n = 3160)</b>	<b>Missing urine sample (n = 1930)</b>
<b>Characteristic</b>	<b>Mean (SD) or %</b>	<b>Mean (SD) or %</b>
Age, years, mean (SD)*	54.3 (12.9)	57.2 (12.5)
Female	62.8	65.3
BMI (kg/m <sup>2</sup> ), mean (SD)	31.7 (7.1)	31.9 (7.5)
Highest level of education completed*		
Less than high school	17.0	25.3
High school/GED	37.3	36.0
College degree/certificate	28.9	23.0
Graduate/professional school	16.8	15.7
Household income status*		
Low	13.4	18.9
Lower-middle	22.7	26.8
Upper-middle	31.1	27.7
High	32.8	26.6
Neighborhood SES z-score, mean (SD)*	0.07 (5.0)	-0.9 (4.9)
Medical Insurance Access	87.1	86.1
Smoking status*		
Never	70.9	63.6
Former	17.3	20.9
Current	11.8	15.5
Physical activity*		
Poor	47.0	53.5
Intermediate	32.5	29.8
Ideal	20.5	16.7
Nutritional status*		
Poor	57.9	64.9
Intermediate	40.9	34.6
Ideal	1.2	0.6
Alcohol consumption, past 12 months	45.2	46.8
Occupation*		
Management/professional	37.5	32.6
Service	23.3	28.1
Sales	18.4	16.0
Other	20.9	23.3
Hypertension	59.2	61.4
Diabetes*	20.6	24.1
Hyperlipidemia	29.3	30.2
eGFR, mL/min/1.73m <sup>2</sup> , mean (SD)*	94.4 (21.3)	90.5 (22.4)
Serum creatinine, mg/dL, mean (SD)*	1.0 (0.3)	1.1 (0.8)
Serum Cystatin C, mg/L, mean (SD)*	0.7 (0.3)	0.8 (.5)
PM <sub>2.5</sub> 1-year mean (µg/m <sup>3</sup> )*	12.1 (0.6)	12.4 (0.6)
PM <sub>2.5</sub> 3-year mean (µg/m <sup>3</sup> )*	12.3 (0.4)	12.5 (0.5)
O <sub>3</sub> 1-year mean (ppb)*	40.1 (1.7)	40.4 (3.8)
O <sub>3</sub> 3-year mean (ppb)*	40.8 (1.5)	40.4 (3.7)

\*p&lt;0.05

	<b>Pollutant</b>			
	<b>1-year PM<sub>2.5</sub></b>	<b>3-year PM<sub>2.5</sub></b>	<b>1-year O<sub>3</sub></b>	<b>3-year O<sub>3</sub></b>
	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)
<b>eGFR &lt;60 mL/min/1.73m<sup>2</sup></b>				
Model 1 <sup>a</sup>	1.32 (1.09, 1.60)*	1.56 (1.24, 1.97)*	1.01 (0.95, 1.07)	1.00 (0.94, 1.06)
Model 2 <sup>b</sup>	1.00 (0.83, 1.22)	1.14 (0.91, 1.42)	1.01 (0.96, 1.06)	1.02 (0.96, 1.08)
Model 3 <sup>c</sup>	1.00 (0.83, 1.20)	1.12 (0.90, 1.39)	1.00 (0.95, 1.05)	1.01 (0.95, 1.07)
Model 4 <sup>d</sup>	1.08 (0.85, 1.38)	1.26 (0.93, 1.70)	1.06 (0.99, 1.13)	1.07 (0.99, 1.16)
Model 5 <sup>e</sup>	1.00 (0.82, 1.22)	1.13 (0.91, 1.42)	1.01 (0.95, 1.06)	1.02 (0.96, 1.08)
<b>UACR &gt;30 mg/g</b>				
Model 1 <sup>a</sup>	1.06 (0.87, 1.30)	1.05 (0.81, 1.36)	1.02 (0.96, 1.09)	1.01 (0.94, 1.08)
Model 2 <sup>b</sup>	0.91 (0.73, 1.12)	0.83 (0.64, 1.06)	0.99 (0.94, 1.05)	1.00 (0.94, 1.07)
Model 3 <sup>c</sup>	0.89 (0.72, 1.10)	0.78 (0.60, 1.02)	1.00 (0.94, 1.06)	1.00 (0.94, 1.07)
Model 4 <sup>d</sup>	1.02 (0.81, 1.29)	0.94 (0.68, 1.30)	1.02 (0.94, 1.10)	1.03 (0.94, 1.12)
Model 5 <sup>e</sup>	0.90 (0.72, 1.13)	0.82 (0.64, 1.05)	1.01 (0.94, 1.07)	1.01 (0.94, 1.08)
<b>Serum Creatinine &gt;0.9 mg/dL</b>				
Model 1 <sup>a</sup>	0.95 (0.85, 1.05)	0.89 (0.75, 1.04)	1.01 (0.98, 1.04)	1.01 (0.98, 1.04)
Model 2 <sup>b</sup>	0.86 (0.75, 0.98)*	0.83 (0.68, 1.02)	1.02 (0.99, 1.06)	1.03 (1.00, 1.07)
Model 3 <sup>c</sup>	0.86 (0.76, 0.98)*	0.84 (0.68, 1.02)	1.02 (0.99, 1.05)	1.03 (1.00, 1.07)
Model 4 <sup>d</sup>	0.87 (0.75, 1.00)	0.85 (0.68, 1.05)	1.03 (0.99, 1.07)	1.03 (0.99, 1.08)
Model 5 <sup>e</sup>	0.84 (0.74, 0.96)*	0.83 (0.68, 1.02)	1.03 (1.00, 1.06)	1.03 (1.00, 1.07)
<b>Cystatin C &gt;0.71 mg/g</b>				
Model 1 <sup>a</sup>	1.29 (1.12, 1.48)*	1.46 (1.22, 1.74)	1.00 (0.98, 1.02)	0.98 (0.96, 1.00)
Model 2 <sup>b</sup>	0.98 (0.86, 1.12)	1.03 (0.89, 1.18)	1.00 (0.98, 1.03)	1.00 (0.98, 1.03)
Model 3 <sup>c</sup>	1.00 (0.88, 1.14)	1.04 (0.91, 1.20)	1.00 (0.98, 1.03)	1.00 (0.97, 1.02)
Model 4 <sup>d</sup>	1.04 (0.90, 1.21)	1.16 (0.99, 1.37)	1.01 (0.98, 1.04)	1.01 (0.98, 1.04)
Model 5 <sup>e</sup>	0.98 (0.86, 1.11)	1.03 (0.89, 1.18)	1.00 (0.98, 1.03)	1.00 (0.98, 1.03)

**Table S2.** Results from logistic regression of dichotomized outcomes.

<sup>a</sup>Model 1 unadjusted, accounting for clustering on census tract

<sup>b</sup>Model 2 adjusted for age, sex, BMI, education level, NSES z-score, medical insurance, smoking status, physical activity, alcohol consumption, occupation, and hyperlipidemia, accounting for clustering by census tract

<sup>c</sup>Model 3 adjusted for all covariates in model 2, plus use of non-steroidal anti-inflammatory drugs, diuretic medication, and statin medications, accounting for clustering by census tract

<sup>d</sup>Model 4 adjusted for all covariates in model 2, plus diabetes and hypertension, accounting for clustering by census tract.

<sup>e</sup>Model 5 adjusted for all covariates in model 2, plus the other pollutant, O<sub>3</sub> in PM<sub>2.5</sub> models, and PM<sub>2.5</sub> in O<sub>3</sub> models, accounting for clustering by census tract  
\*p<0.05

**Table S3.** Results from linear regression of residential distance to A1 or A2 road and markers of renal function (N = 5090).

	<b>Residential distance to A1/A2 road</b>				<b>Log-transformed distance to road (continuous)</b>
	<b>&lt;150m (n=111)</b>	<b>150-299m (n=166)</b>	<b>300-999m (n=1210)</b>	<b>≥1000m (n=3603)</b>	
	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)	
<b>eGFR</b>				REF	
Model 1 <sup>a</sup>	-1.7 (-6.3, 2.8)	-0.09 (-3.7, 3.5)	1.1 (-1.4, 3.5)		-0.3 (-1.2, 0.7)
Model 2 <sup>b</sup>	-1.4 (-4.7, 2.0)	3.2 (1.2, 5.2)*	0.5 (-0.6, 1.6)		-0.3 (-0.8, 0.2)
Model 3 <sup>c</sup>	0.4 (-4.5, 5.4)	2.8 (-0.09, 5.8)	-0.3 (-2.2, 1.6)		-0.3 (-1.0, 0.3)
Model 4 <sup>d</sup>	-1.7 (-5.1, 1.7)	3.2 (1.2, 5.3)*	0.4 (-0.7, 1.5)		-0.3 (-0.8, 0.2)
<b>Log UACR</b>				REF	
Model 1 <sup>a</sup>	0.1 (-0.2, 0.4)	-0.2 (-0.4, -0.003)*	-0.1 (-0.2, 0.002)*		0.02 (-0.03, 0.07)
Model 2 <sup>b</sup>	0.1 (-0.2, 0.4)	-0.3 (-0.4, -0.1)*	-0.08 (-0.2, 0.03)		0.01 (-0.03, 0.06)
Model 3 <sup>c</sup>	0.1 (-0.4, 0.7)	-0.3 (-0.5, -0.07)*	-0.04 (-0.2, 0.1)		-0.01 (-0.09, 0.06)
Model 4 <sup>d</sup>	0.2 (-0.08, 0.5)	-0.2 (-0.4, -0.1)*	-0.07 (-0.2, 0.03)		0.003 (-0.04, 0.05)
<b>Serum Creatinine</b>				REF	
Model 1 <sup>a</sup>	0.04 (-0.09, 0.2)	-0.04 (-0.08, -0.0005)*	0.007 (-0.04, 0.05)		-0.003 (-0.02, 0.01)
Model 2 <sup>b</sup>	0.05 (-0.09, 0.2)	-0.06 (-0.09, -0.03)*	0.006 (-0.03, 0.04)		-0.002 (-0.02, 0.01)
Model 3 <sup>c</sup>	-0.04 (-0.1, 0.01)	-0.07 (-0.1, -0.02)*	0.02 (-0.03, 0.08)		0.005 (-0.008, 0.02)
Model 4 <sup>d</sup>	0.06 (-0.08, 0.2)	-0.06 (-0.08, -0.03)*	0.008 (-0.03, 0.04)		-0.004 (-0.02, 0.01)
<b>Cystatin C</b>				REF	
Model 1 <sup>a</sup>	0.02 (-0.04, 0.07)	-0.04 (-0.07, -0.008)*	-0.006 (-0.04, 0.03)		0.002 (-0.009, 0.01)
Model 2 <sup>b</sup>	0.003 (-0.07, 0.08)	-0.05 (-0.1, 0.004)	0.005 (-0.02, 0.03)		0.002 (-0.006, 0.009)
Model 3 <sup>c</sup>	-0.03 (-0.09, 0.02)	-0.05 (-0.09, -0.02)*	0.02 (-0.02, 0.06)		0.004 (-0.007, 0.02)
Model 4 <sup>d</sup>	0.01 (-0.05, 0.07)	-0.05 (-0.08, -0.03)*	0.007 (-0.02, 0.03)		0.0004 (-0.007, 0.008)

<sup>a</sup>Model 1 unadjusted, accounting for clustering on census tract

<sup>b</sup>Model 2 adjusted for age, sex, BMI, education level, NSES z-score, medical insurance, smoking status, physical activity, alcohol consumption, occupation, and hyperlipidemia, accounting for clustering by census tract

<sup>c</sup>Model 3 adjusted for all covariates in model 2, plus use of non-steroidal anti-inflammatory drugs, diuretic medication, and statin medications, accounting for clustering by census tract

<sup>d</sup>Model 4 adjusted for all covariates in model 2, plus diabetes and hypertension, accounting for clustering by census tract.

\*p < 0.05

**Table S4.** Results from linear regression of residential distance to A1 road and markers of renal function.

	<b>Residential distance to A1 road</b>				<b>Log-transformed distance to road (continuous)</b>
	<b>&lt;150m (n=35)</b>	<b>150-299m (n=98)</b>	<b>≥300m (n=835)</b>	<b>≥1000m (n=4122)</b>	
	Beta (95% CI)	Beta (95% CI)	Beta (95% CI)	REF	
<b>eGFR</b>				REF	
Model 1 <sup>a</sup>	-4.5 (-11.0, 2.1)	-0.3 (-4.3, 3.8)	2.1 (-0.3, 4.6)		-0.1 (-1.1, 0.9)
Model 2 <sup>b</sup>	-2.1 (-8.9, 4.7)	2.9 (0.4, 5.4)*	0.5 (-0.5, 1.6)		-0.5 (-1.0, 0.05)
Model 3 <sup>c</sup>	0.5 (-8.2, 9.2)	3.1 (0.2, 6.1)*	-0.4 (-2.1, 1.2)		-0.1 (-0.9, 0.7)
Model 4 <sup>d</sup>	-2.2 (-8.9, 4.5)	3.1 (0.6, 5.6)*	0.4 (-0.7, 1.5)		-0.4 (-0.9, 0.1)
<b>Log of urine albumin/creatinine ratio</b>					
Model 1 <sup>a</sup>	0.5 (-0.03, 1.0)	-0.1 (-0.5, 0.2)	-0.09 (-0.2, 0.04)		-0.002 (-0.06, 0.06)
Model 2 <sup>b</sup>	0.4 (-0.2, 1.0)	-0.2 (-0.4, 0.04)	-0.03 (-0.2, 0.1)		0.0007 (-0.04, 0.04)
Model 3 <sup>c</sup>	0.1 (-0.8, 1.0)	-0.3 (-0.6, -0.06)	-0.01 (-0.2, 0.2)		0.008 (-0.06, 0.08)
Model 4 <sup>d</sup>	0.5 (-0.009, 0.9)	-0.2 (-0.4, 0.02)	-0.009 (-0.1, 0.1)		-0.007 (-0.05, 0.03)
<b>Serum Creatinine</b>				REF	
Model 1 <sup>a</sup>	-0.02 (-0.09, 0.06)	-0.03 (-0.06, 0.009)	-0.02 (-0.06, 0.03)		0.01 (-0.004, 0.03)
Model 2 <sup>b</sup>	-0.01 (-0.09, 0.07)	-0.06 (-0.09, 0.02)	-0.01 (-0.04, 0.02)		0.01 (-0.002, 0.02)
Model 3 <sup>c</sup>	-0.06 (-0.1, 0.02)	-0.06 (-0.1, -0.01)*	-0.005 (-0.04, 0.03)		0.003 (-0.02, 0.02)
Model 4 <sup>d</sup>	-0.006 (-0.08, 0.07)	--0.06 (-0.09, -0.02)*	-0.009 (-0.04, 0.02)		0.008 (-0.004, 0.02)
<b>Cystatin C</b>				REF	
Model 1 <sup>a</sup>	0.03 (-0.03, 0.08)	-0.04 (-0.08, -0.007)	-0.03 (-0.05, -0.004)		0.007 (-0.004, 0.02)
Model 2 <sup>b</sup>	-0.02 (-0.1, 0.1)	-0.05 (-0.1, 0.02)	-0.009 (-0.04, 0.02)		0.008 (0.0005, 0.02)
Model 3 <sup>c</sup>	-0.04 (-0.1, 0.05)	-0.06 (-0.1, -0.02)	-0.003 (-0.03, 0.02)		0.003 (-0.009, 0.02)
Model 4 <sup>d</sup>	-0.01 (-0.07, 0.05)	-0.06 (-0.08, -0.03)*	-0.006 (-0.02, 0.01)		0.006 (-0.0009, 0.01)

<sup>a</sup>Model 1 unadjusted, accounting for clustering on census tract

<sup>b</sup>Model 2 adjusted for age, sex, BMI, education level, NSES z-score, medical insurance, smoking status, physical activity, alcohol consumption, occupation, and hyperlipidemia, accounting for clustering by census tract

<sup>c</sup>Model 3 adjusted for all covariates in model 2, plus use of non-steroidal anti-inflammatory drugs, diuretic medication, and statin medications, accounting for clustering by census tract

<sup>d</sup>Model 4 adjusted for all covariates in model 2, plus diabetes and hypertension, accounting for clustering by census tract.

\*p < 0.05

**Table S5.** Correlation matrix between PM<sub>2.5</sub> and O<sub>3</sub>

	<b>1-year PM<sub>2.5</sub></b>	<b>3-year PM<sub>2.5</sub></b>	<b>1-year O<sub>3</sub></b>	<b>3-year O<sub>3</sub></b>
<b>1-year PM<sub>2.5</sub></b>	1.00			
<b>3-year PM<sub>2.5</sub></b>	0.86	1.00		
<b>1-year O<sub>3</sub></b>	0.12	0.044	1.00	
<b>3-year O<sub>3</sub></b>	-0.069	-0.033	0.94	1.00