

Table S3: Prevalence ratios for albuminuria  $\geq 30$  mg/g creatinine comparing a 75<sup>th</sup> vs 25<sup>th</sup> percentile change in urine arsenic concentrations ( $\mu\text{g/g}$  creatinine) by participant characteristics (N=3821).

	N	PR	Total Arsenic		Sum of inorganic and methylated		
			95% CI	P <sub>interaction</sub>	PR	95% CI	P <sub>interaction</sub>
Overall	3821	1.22	(1.12, 1.31)		1.26	(1.16, 1.36)	
Sex							
Male	1561	1.19	(1.05, 1.35)	0.282	1.27	(1.11, 1.45)	0.395
Female	2260	1.23	(1.11, 1.35)		1.26	(1.13, 1.39)	
Age, years							
<55 years	1894	1.27	(1.12, 1.43)	0.091	1.37	(1.20, 1.56)	0.021
55 – 64 years	1251	1.19	(1.04, 1.35)		1.17	(1.02, 1.33)	
>65 years	676	1.13	(0.96, 1.32)		1.17	(0.98, 1.38)	
Study Region							
Oklahoma	1267	1.16	(0.98, 1.36)	0.407	1.23	(1.04, 1.45)	0.568
Arizona	1298	1.16	(1.07, 1.26)		1.17	(1.07, 1.27)	
Dakotas	1256	1.23	(1.03, 1.46)		1.23	(1.03, 1.46)	
Education, years							
No HS	847	1.07	(0.94, 1.20)	0.031	1.08	(0.95, 1.22)	0.016
Some HS	960	1.18	(1.02, 1.34)		1.15	(0.99, 1.32)	
Completed HS	2014	1.36	(1.19, 1.54)		1.49	(1.29, 1.71)	
BMI, kg/m <sup>2</sup>							
<25	588	1.21	(0.99, 1.47)	0.436	1.29	(1.03, 1.59)	0.146
25 - 29	1287	1.23	(1.07, 1.39)		1.30	(1.13, 1.49)	
>29	1946	1.25	(1.12, 1.39)		1.26	(1.12, 1.41)	
Smoking Status							
Never	1298	1.18	(1.04, 1.33)	0.851	1.19	(1.04, 1.34)	0.467
Former	1246	1.20	(1.05, 1.37)		1.22	(1.06, 1.40)	
Current	1277	1.28	(1.09, 1.50)		1.41	(1.19, 1.66)	
Alcohol Status							
Never	1601	1.18	(1.05, 1.32)	0.296	1.24	(1.09, 1.39)	0.317
Former	618	1.16	(0.96, 1.39)		1.14	(0.93, 1.38)	
Current	1602	1.28	(1.12, 1.45)		1.35	(1.17, 1.54)	
Diabetes							
No	1922	1.26	(1.01, 1.57)	0.349	1.35	(1.07, 1.69)	0.581
Yes	1899	1.20	(1.10, 1.29)		1.23	(1.13, 1.33)	
Systolic BP, mmHg							
<120	1421	1.22	(1.01, 1.47)	0.591	1.20	(0.99, 1.45)	0.579
120 – 139	1536	1.22	(1.06, 1.38)		1.29	(1.12, 1.48)	
$\geq 140$	864	1.19	(1.06, 1.31)		1.23	(1.09, 1.37)	
Hypertension medication							
No	2927	1.23	(1.11, 1.36)	0.534	1.30	(1.16, 1.44)	0.308
Yes	894	1.19	(1.05, 1.33)		1.19	(1.05, 1.34)	
eGFR, mL/minute/1.73m <sup>2</sup>							
$\leq 60$	171	1.24	(1.13, 1.35)	0.041	1.30	(1.18, 1.42)	0.021
>60	3650	0.98	(0.89, 1.07)		0.96	(0.87, 1.05)	
Urine cadmium ( $\mu\text{g/g}$ )							
<0.7	1287	1.24	(1.07, 1.42)	0.857	1.30	(1.11, 1.50)	0.306
0.7 – 1.21	1262	1.23	(1.07, 1.40)		1.26	(1.09, 1.45)	
$\geq 1.22$	1271	1.21	(1.06, 1.36)		1.26	(1.10, 1.43)	
Fibrinogen (mg/dl)							
<264	1305	1.21	(0.98, 1.47)	0.06	1.36	(1.09, 1.68)	0.583
264 - 324	1287	1.20	(1.02, 1.40)		1.30	(1.10, 1.52)	
>324	1229	1.21	(1.10, 1.32)		1.18	(1.07, 1.29)	

eGFR: estimated glomerular filtration rate.

Prevalence ratios were adjusted for age in years, sex, study location, body mass index ( $\text{kg}/\text{m}^2$ ), education in years, smoking status, alcohol status, systolic blood pressure, hypertension medication (yes or no), diabetes status (yes or no), eGFR category ( $\leq 60$   $\text{mL}/\text{minute}/1.73\text{m}^2$ ) urine cadmium (log-transformed), and fibrinogen (mg/dl).

<sup>b</sup> estimated using an interaction term between  $\log_2$ -transformed urine arsenic and the corresponding group of categories and using the Wald test.