

Table S1. Participant characteristics by quartiles of total urine arsenic

| | N | Total Urine Arsenic ($\mu\text{g/g}$ creatinine) | | | | P-trend |
|---|------|---|-------------------|-------------------|-------------------|---------|
| | | <7.8 | 7.8 – 12.8 | 12.8 – 20.5 | >20.5 | |
| Number | 3821 | 960 | 957 | 952 | 952 | |
| Sex | | | | | | |
| Male | 1561 | 48.2 | 41.4 | 39.0 | 34.7 | <0.01 |
| Female | 2260 | 51.8 | 58.6 | 61.0 | 65.2 | |
| Age, years | 3821 | 56.5 (8.2) | 55.9 (8.0) | 56.6 (8.0) | 56.0 (7.9) | 0.48 |
| Study Location | | | | | | |
| Arizona | 1298 | 9.2 | 27.7 | 41.3 | 58.0 | <0.01 |
| Oklahoma | 1267 | 65.0 | 35.8 | 19.8 | 11.7 | |
| South Dakota | 1256 | 25.8 | 36.5 | 38.9 | 30.3 | |
| Education, years | | | | | | |
| No HS | 847 | 10.2 | 20.1 | 26.3 | 32.3 | <0.01 |
| Some HS | 960 | 25.1 | 23.7 | 24.6 | 27.1 | |
| Completed HS | 2014 | 64.7 | 56.2 | 49.1 | 40.6 | |
| BMI, kg/m^2 | 3821 | 30.9 (5.7) | 31.4 (6.5) | 30.9 (6.5) | 30.4 (6.4) | 0.01 |
| Smoking status | | | | | | |
| Never | 1298 | 35.2 | 34.9 | 32.7 | 33.1 | 0.81 |
| Former | 1246 | 31.3 | 29.7 | 33.9 | 35.6 | |
| Current | 1277 | 33.5 | 35.4 | 33.4 | 31.3 | |
| Alcohol status | | | | | | |
| Never | 1601 | 47.4 | 42.7 | 40.6 | 36.8 | <0.01 |
| Former | 618 | 17.7 | 16.2 | 15.6 | 15.2 | |
| Current | 1602 | 34.9 | 41.1 | 43.8 | 48.0 | |
| Diabetes | | | | | | |
| No | 1922 | 61.2 | 52.5 | 47.9 | 39.6 | <0.01 |
| Yes | 1899 | 38.8 | 47.5 | 52.1 | 60.6 | |
| Systolic BP, mmHg | 3821 | 126.8 (18.4) | 127.1 (18.7) | 127.2 (19.1) | 128.7 (20.8) | 0.03 |
| Hypertension Medication | | | | | | |
| No | 2927 | 75.7 | 76.7 | 78.4 | 75.6 | 0.85 |
| Yes | 894 | 24.3 | 23.3 | 21.6 | 23.4 | |
| eGFR, ml/min/1.73m^2 | 3821 | 94.6 (17.8) | 95.8 (18.4) | 98.7 (16.6) | 99.1 (21.0) | <0.01 |
| Fibrinogen, mg/dl | 3821 | 293.4 (74.8) | 296.7 (75.7) | 306.8 (78.4) | 315.9 (90.2) | <0.01 |
| Urine cadmium, $\mu\text{g/g}$ | 3821 | 1.0 (1.7) | 1.2 (2.6) | 1.3 (1.4) | 1.4 (1.8) | <0.01 |
| Urine ACR, mg/g | 3821 | 136.8 (776.8) | 237.3 (974.6) | 290.8 (1075.2) | 614.8 (2667.2) | <0.01 |
| Albuminuria status | | | | | | |
| No | 2674 | 81.5 | 73.7 | 70.0 | 54.7 | <0.01 |
| Yes | 1147 | 18.5 | 26.3 | 30.0 | 45.3 | |
| Median (IQR) concentration, $\mu\text{g/g}$ | | | | | | |
| Total arsenic | 3821 | 5.6 (4.5, 6.7) | 10.1 (8.8, 11.4) | 15.9 (14.3, 18.1) | 29.2 (23.8, 39.3) | |
| Sum of inorganic and methylated | 3821 | 4.3 (3.3, 5.4) | 8.0 (6.8, 9.5) | 13.0 (11.0, 15.2) | 21.8 (17.1, 29.0) | |
| Arsenobetaine | 3821 | 0.50 (0.33, 0.77) | 0.63 (0.38, 1.33) | 0.79 (0.46, 1.94) | 1.17 (0.56, 6.81) | |

Data are % for categorical variables and mean (SD) for continuous variables