**Supplemental Table 1** Percent Differences (95%CI) in Leukocyte Telomere Length by Phthalate Exposure, National Health and Nutrition Examination Survey, 1999–2002 by gender and by smokers.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Male | Female | Smokers (currents smokers and serum cotinine > 10 | Non Smokers (former and never smokers and serum cotinine ≤10 |
| Mono-ethyl phthalate (MEP)  | (n=1173) | (n=1238) | (n=621) | (n=1791) |
| Q1: ≤42.11 ng/mL | referent | referent | referent | referent |
| Q2: 42.12 – 116.10 ng/mL | 1.71 (-4.11, 7.90) | 2.53 (-3.92, 9.53) | 5.23 (-3.25, 14.45) | 1.11 (-3.05, 5.34) |
| Q3: 116.11 – 318.45 ng/mL | 1.51 (-4.69, 8.11) | 2.02 (-2.86, 7.25) | 3.87 (-2.96, 11.18) | 0.80 (-3.92, 5.87) |
| Q4: >318.45 ng/mL | 2.22 (-4.97, 9.97) | 0.80 (-5.82, 7.90) | 4.92 (-3.63, 14.22) | -0.10 (-5.16, 5.23) |
| *p* trend | 0.93 | 0.81 | 0.64 | 0.88 |
|  |  |  |  |  |
| Mono-butyl phthalate (MBP), | (n=1174) | (n=1242) | (n=622) | (n=1795) |
| Q1: ≤10.40 ng/mL | referent | referent | referent | referent |
| Q2: 10.41 – 22.24 ng/mL | 2.94 (-2.27, 8.44) | -3.15 (-5.82, 2.63) | -3.92 (-9.97, 2.43) | 0.70 (-3.92, 5.44) |
| Q3: 22.25 – 42.83 ng/mL | 1.51 (-3.63, 6.82) | -2.96 (-7.23, 1.61) | -5.45 (-12.72, 2.33) | 0.30 (-3.63, 4.50) |
| Q4: >42.83 ng/mL | 3.46 (-2.27, 9.53) | -3.05 (-8.52, 2.74) | -4.97 (-13.24, 4.08) | 1.51 (-3.73, 7.04) |
| *p* trend | 0.59 | 0.60 | 0.52 | 0.94 |
|  |  |  |  |  |
| Mono-benzyl phthalate (MBzP). | (n=1174) | (n=1242) | (n=622) | (n=1794) |
| Q1: ≤4.10 ng/mL | referent | referent | referent | referent |
| Q2: 4.11 – 9.58 ng/mL | 3.77 (-1.00, 8.65) | 1.51 (-5.26, 8.87) | 5.55 (-3.63, 15.49) | 1.51 (-3.54, 6.72) |
| Q3: 9.58 – 20.51 ng/mL | 0.90 (-5.26, 7.57) | -0.90 (-6.20, 4.71) | 4.19 (-5.45, 14.68) | -1.39 (-6.11, 3.56) |
| Q4: >20.51 ng/mL | 0.90 (-4.78, 6.82) | 2.33 (-3.82, 8.87) | 4.60 (-4.78, 14.91) | 0.60 (-4.02, 5.44) |
| *p* trend | 0.22 | 0.25 | 0.63 | 0.31 |
|  |  |  |  |  |
| Mono-(2-ethyl)-hexyl phthalate (MEHP), | (n=1174) | (n=1242) | (n=622) | (n=1794) |
| Q1: ≤1.20 ng/mL | referent | referent | referent | referent |
| Q2: 1.21 – 3.44 ng/mL | 3.67 (-0.40, 7.90) | 1.92 (-2.18, 6.08) | 5.23 (-2.86, 14.11) | 1.31 (-2.08, 4.71) |
| Q3: 3.44 – 8.04 ng/mL | 7.36 (1.51, 13.54) | 3.15 (-1.29, 7.68) | 7.79 (-0.30, 16.53) | 4.71 (0.20, 9.53) |
| Q4: >8.04 ng/mL | 7.36 (1.71, 17.35) | 6.82 (0.50, 13.43) | 10.52 (1.51, 20.20) | 5.87 (1.21, 13.88) |
| *p* trend | 0.03 | 0.10 | 0.13 | 0.08 |

\* Adjusted for urine creatinine, sex, age (years, continuous), education (less than high-school, high school graduate, some college and above), race/ethnicity (non-Hispanic white, non-Hispanic black, Mexican American, other), alcohol consumption, self-reported smoking status (current, former, or never smoker), serum cotinine (natural log-transformed), body weight status (underweight/normal, overweight, obese) c-reactive protein (natural log-transformed), hypertension, self-reported diabetes, and self-reported CDV diseases

Supplement Figure Legend.

Supplement Figure 1. Dose-response association between MEHP and LTL (natural log-transformed) adjusted for urine creatinine, sex, age (years, continuous), education (less than high-school, high school graduate, some college and above), race/ethnicity (non-Hispanic white, non-Hispanic black, Mexican American, other), alcohol consumption, self-reported smoking status (current, former, or never smoker), serum cotinine (natural log-transformed), body weight status (underweight/normal, overweight, obese) c-reactive protein (natural log-transformed), hypertension, self-reported diabetes, and self-reported CDV diseases. *Y*-axis represents the difference in LTL (natural log-transformed between individuals with any value of MEHP with individuals with 0.7 ng/mL of urinary MEHP. The dashed lines represent the 95% confidence of interval. Knots (placed at 5th, 35th, 65th and 95th percentile) are represented by dots. Note that the statistical significance is lost among the individuals that were in the upper 99.75th percentile.

