TOXIC AND SUBSTANCE USE DISORDERS

BLOOD LEAD AND READING READINESS

Investigators at the University of Maryland School of Nursing, Johns Hopkins School of Public Health, and Department of Health, Providence, Rhode Island, evaluated the relationship between reading readiness test scores for children attending public kindergarten in Providence, RI, and state health department records of blood lead levels (BLLs). The median geometric mean BLL was 4.2 mcg/dL and 20% of children had at least 1 venous BLL >10 mcg/dL. Compared with children with BLLs <2 mcg/dL, increasing BLLs resulted in progressive decreases in phonological awareness literacy screening scores (PALS-K). Compared with children with BLLs <5 mcg/dL, the adjusted prevalence ratios for failing to achieve the national benchmark for reading readiness were 1.21 and 1.56 for children with BLLs of 5 to 9 and >10 mcg/L, respectively. Reading readiness scores decreased by 4.5 and 10 points for children with BLLs of 5 to 9 and >10 mcg/dL, respectively, compared with BLLs <5 mcg/dL. (McLaine P, Navas-Acien A, Lee R, Simon P, Diener-West M, Agnew, J. Elevated blood lead levels and reading readiness at the start of kindergarten. **Pediatrics** 2013 Jun;131(6):1081-9). (Response: Pat McLaine DrPh MPH RN, University of Maryland School of Nursing, Baltimore, MD. E-mail: mclaine@son.umaryland.edu).

COMMENT. Lead exposure at levels well below 10 mcg/dL contributes to decreased reading readiness at kindergarten entry in an urban school district 59% Hispanic, with no evidence of a threshold. The authors recommend further investigation in other high-risk US populations, utilizing collaboration between public health, education, and community data providers. The Rhode Island Department of Health recommends annual testing for BLLs for children 9 to 72 months of age.

STIMULANT MEDICATION AND SUBSTANCE USE OUTCOME

Investigators from the University of California, Los Angeles, performed a meta-analysis of the association between treatment with stimulant medication during childhood and later substance use and substance abuse or dependence outcomes. Odds ratios were obtained for alcohol, cocaine, marijuana, nicotine, and nonspecific drugs for 2565 participants from 15 different studies. Results suggest comparable outcomes between children with and without medication treatment history across all substance types. Treatment of ADHD with stimulant medication neither protects nor increases the risk of later substance use disorders. (Humphreys KL, Eng T, Lee SS. Stimulant medication and substance use outcomes. **JAMA Psychiatry** 2013 Jul 1;70(7):740-9). (Response: Kathryn L Humphreys MA EdM, or Steve S Lee PhD, Department of Psychology, University of California, Los Angeles (UCLA). E-mail: k.humphreys@ucla.edu).

COMMENT. In an earlier meta-analysis report, Wilens TE et al. (**Pediatrics** 2003 Jan;111(1):179-85) found stimulant therapy in childhood to be associated with a reduction in the risk for subsequent drug and alcohol use disorders in young adulthood.