

New lead testing recommendations inconclusive, but do not mean screening

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An NYU pediatrician and researcher writes in *JAMA Pediatrics* that new recommendations on testing children for lead are inconclusive, but do not mean that we should abandon screening children for elevated lead

levels.

The editorial—written by Michael Weitzman, MD, professor of pediatrics and environmental medicine at NYU School of Medicine and NYU College of Global Public Health—discusses new lead [screening](#) recommendations from the U.S. Preventive Services Task Force (USPSTF). The USPSTF is a group of independent experts in [disease prevention](#) that make evidence-based recommendations about clinical preventive services, including cancer screenings, healthy nutrition and exercise, and the use of preventive medications such as aspirin or cholesterol lowering drugs.

Blood [lead levels](#) among [children](#) in the United States have decreased profoundly in the past several decades, thanks to an array of public health and pediatric prevention efforts and removing lead from gasoline. Yet, lead remains among the most common and dangerous environmental exposures for children in the U.S.: nearly half a million children have elevated blood lead levels (greater than 5 micrograms per deciliter), and one third of homes have lead-based paint.

There is scientific, public health, and medical consensus that there is no level of lead exposure that is safe. The adverse effects of lead—including decreased school achievement, [attention deficit hyperactivity disorder](#) (ADHD), behavioral problems, and lower IQ scores—can occur at the very lowest levels of children's exposure. However, it remains unclear how effective screening for elevated lead levels in asymptomatic children actually is in protecting children from lead's effects, despite the American Academy of Pediatrics, the Centers for Disease Control and Prevention, and the Centers for Medicare and Medicaid Services all advising doctors to screen children 1 to 5 years of age for elevated blood lead levels.

The April 16 issue of *JAMA* includes recommendations from the

USPSTF for screening for elevated blood lead levels in children and pregnant women, updating its previous recommendations from 2006. After a systematic review of relevant studies, the USPSTF recommendations conclude "that the current evidence is insufficient to assess the balance of benefits and harms of screening for elevated [blood lead levels](#) in asymptomatic children."

In the accompanying editorial in *JAMA Pediatrics*, Weitzman writes, "It is important to highlight that the USPSTF did not recommend for or against such screening but rather concluded that the information needed to make such a determination is insufficient while acknowledging the gravity and magnitude of children having elevated lead levels."

Weitzman notes that the recommendations are a result of the lack of quality studies, not because screening was found to be potentially harmful or ineffective. The recommendations reinforce the need for environmental interventions to prevent lead exposure, particularly with lead-based paint in disrepair in homes, and research on these interventions. The USPSTF recommendations also underscore the need for effective ways to identify children for targeted screening at the same time as widespread prevention interventions are implemented.

"The inconclusive findings of the new USPSTF [recommendation](#) does not mean that screening children for elevated lead levels is not necessary, nor does it shed light on whether screening should be targeted to children at high risk or whether it should be universally done. Only more rigorously conducted research will provide evidence-based answers to these questions," writes Weitzman. "Nowhere does the USPSTF recommend that we abandon screening children for elevated lead levels." He also notes the critical need for ongoing collaboration between pediatricians, health departments, housing and educational authorities, early intervention programs, and local and state municipalities concerning this ubiquitous health problem of the nation's children.

More information: *JAMA Pediatrics*, [DOI: 10.1001/jamapediatrics.2019.0855](https://doi.org/10.1001/jamapediatrics.2019.0855)

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