

USPSTF Bulletin

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U.S. Preventive Services Task Force Draft Recommendation Calls for More Research on How Clinicians Can Help Prevent Health **Problems Related to Lead Exposure**

WASHINGTON, D.C. - October 30, 2018 - The U.S. Preventive Services Task Force (Task Force) today posted a draft recommendation statement and draft evidence reviews on screening for elevated blood lead levels in children and pregnant women. Based on its review of the evidence, the Task Force found that more research is needed to determine how primary care clinicians can help prevent health problems that can result from lead exposure in children and pregnant women with no signs or symptoms. These are I statements

(insufficient evidence) and not recommendations for or against screening.

Grades in this recommendation:

I: The balance of benefits and harms cannot be determined.

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Exposure to lead can have serious, lifelong negative effects on the health and well-being of children. Common sources of lead exposure include lead paint, lead-based plumbing material, and contaminated drinking water. There have been important advances in reducing the risks of lead exposure in recent decades through successful policy changes to remove lead from gasoline and paint. However, sources of exposure, such as contaminated drinking water, older plumbing, and older homes with lead paint, still exist. There are other less common sources of exposure to lead, including certain types of pottery, toy jewelry containing lead, and some folk or herbal medicines.

The Task Force reviewed the current evidence to determine the benefits and harms of screening for and treating elevated blood lead levels in children and pregnant women with no signs or symptoms. It found that while blood tests can detect elevated levels of lead in the blood, questionnaires to identify people at risk are less effective, and treatments cannot reverse many of the effects of exposure.

"There is no safe level of lead in the blood. Finding and removing sources of lead in the environment that might affect children is essential," says Task Force member Alex Kemper, M.D., M.P.H., M.S. "The Task Force is calling for more research so clinicians can have better screening tools and effective treatments to help prevent health problems that can result from lead exposure."

Elevated amounts of lead in the body affect various organ systems, including the nervous system and the heart, kidneys, and liver. Children absorb lead at a higher rate than adults and are especially vulnerable to the effects of lead on their developing nervous system. High lead levels in children can cause behavioral and learning problems, lower IQ, hyperactivity, impaired growth, hearing problems, anemia, and even death. For pregnant women, high lead levels can cause loss of the fetus during pregnancy, early delivery, low birth weight, and high blood pressure in the mother.

"The best prevention is no exposure to lead in the first place," says Task Force member Michael Silverstein, M.D., M.P.H. "Until there is more research, clinicians should use their best judgment about when to screen for lead exposure and keep up-to-date on any concerns about lead in their community."

The Task Force's draft recommendation statement and draft evidence reviews have been posted for public comment on the Task Force Web site at www.uspreventiveservicestaskforce.org. Comments can be submitted from October 30, 2018 to December 3, 2018 at www.uspreventiveservicestaskforce.org/tfcomment.htm.

The Task Force is an independent, volunteer panel of national experts in prevention and evidence-based medicine that works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications.

The Task Force makes recommendations to help primary care clinicians and patients make informed health care decisions. The Task Force's recommendations only address services offered in the primary care setting or services referred by a primary care clinician. Furthermore, they apply only to people who have no recognized signs or symptoms of the disease or condition.

Dr. Kemper is a board-certified pediatrician and chief of the Division of Ambulatory Pediatrics at Nationwide Children's Hospital. He is also the deputy editor of *Pediatrics*.

Dr. Silverstein is a professor of pediatrics, director of the Division of General Academic Pediatrics, and vice chair of research for the Department of Pediatrics at the Boston University School of Medicine. He is also a staff pediatrician and associate chief medical officer for research and population health at Boston Medical Center.

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