



U.S. Preventive Services Task Force Literature Surveillance Report

Title: Screening for iron deficiency anemia and iron supplementation in pregnant women to improve maternal health and birth outcomes

Literature Surveillance Date: December 2020

Recommendation Summary: In 2015, the USPSTF concluded that the current evidence was insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia (Grade: **I statement**) or routine iron supplementation (Grade: **I statement**) in pregnant women to prevent adverse maternal health and birth outcomes.

Summary of New Evidence: Literature scans were conducted in MEDLINE and the Cochrane Database of Systematic Reviews. Results were limited to English language, August 2014 to present.

Systematic Reviews

No new systematic reviews on screening for iron deficiency anemia in pregnant women were identified. A Cochrane review (search through February 2015, includes 61 studies) addressing daily oral iron supplementation in pregnant women included only one study (discussed below) published after the terminal search date of the previous USPSTF review.¹ Another review (search through February 2016, includes seven studies) did not include any relevant studies that were not addressed in the previous USPSTF review.² A 2016 review (search through July 2015, includes 2 trials of iron supplementation) addressed the risk of gestational diabetes, a potential harm of oral iron supplementation.³

Primary Studies

No new studies related to screening for iron deficiency anemia in pregnant women were identified. A placebo-controlled trial (n=80) addressed the effects of different regimens of daily iron prophylaxis on maternal iron status and pregnancy outcomes in non-anemic pregnant women.⁴ A non-randomized controlled trial of 231 pregnant women without gestational diabetes or previous diabetes mellitus analyzed the effect of iron supplementation on HbA1c levels.⁵ One retrospective cohort study evaluated the use of first-trimester measurements to predict pre-delivery iron deficiency anemia in 4,102 women.⁶

References

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