Primary Care Interventions to Prevent Low Back Pain in Adults

Recommendation Statement

U.S. Preventive Services Task Force

This statement summarizes the U.S. Preventive Services Task Force (USPSTF) recommendations on low back pain and the supporting scientific evidence, and updates the 1996 recommendations contained in the *Guide to Clinical Preventive Services,* second edition.[1] In 1996, the USPSTF found insufficient evidence to recommend for or against counseling patients to exercise, or the routine use of educational interventions, mechanical supports, or risk factor modification to prevent low back pain in asymptomatic adults (I recommendation).[1] Since then, the USPSTF criteria to rate the strength of the evidence have changed.[2] Therefore, this recommendation statement has been updated and revised based on the current USPSTF methodology and rating of the strength of the evidence. Explanations of the current Task Force ratings and of the strength of overall evidence are given in Appendix A and Appendix B, respectively.

The complete information on which this statement is based, including evidence tables and references, is available in the brief update[3] on this topic, on the USPSTF Web site (www.preventiveservices.ahrq.gov). The recommendation statement and brief update are also available in print from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse (call 1-800-358-9295, or e-mail ahrqpubs@ahrq.gov). The recommendation is also posted on the Web site of the National Guideline Clearinghouse™ (www.guideline.gov).

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Summary of Recommendation

The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against the routine use of interventions to prevent low back pain in adults in primary care settings.
I recommendation.

The USPSTF found no new good evidence for or against the use of back strengthening exercises or risk factor modification (eg, increased physical activity, smoking cessation, or reduced alcohol consumption) for the primary prevention of low back pain in adults. There is limited evidence that educational sessions in occupational settings (eg, back schools) produce modest short-term benefits in adults with recurrent or chronic low back pain, but no evidence that such education prevents back pain in healthy individuals or those at risk for back pain. Some interventions, such as mechanical supports, may increase the risk for low back pain. As a result, the USPSTF could not determine the balance between benefits and harms of the different interventions that may be used to prevent low back pain.

Clinical Considerations

- Although exercise has not been shown to prevent low back pain, regular physical activity has other proven health benefits, including prevention of cardiovascular disease, hypertension, type 2 diabetes, obesity, and osteoporosis.
- Neither lumbar supports nor back belts appear to be effective in reducing the incidence of low back pain.

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- Worksite interventions, including educational interventions, have some short-term benefit in reducing the incidence of low back pain. However, their applicability to the primary care setting is unknown.
- Back schools may prevent further back injury for individuals with recurrent or chronic low back pain, but their long-term effectiveness has not been well studied.

References

1. U.S. Preventive Services Task Force; *Guide to Clinical Preventive Services,* 2nd ed. Washington DC: Office of Disease Prevention and Health Promotion; 1996.
2. Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow CD, Teutsch SM, Atkins D; Methods Work Group, Third U.S. Preventive Services Task Force. Current methods of the U.S. Preventive Services Task Force: a review of the process. *Am J Prev Med.* 2001;20(3S):21–35.
3. Krishnaraj R. Primary care interventions to prevent low back pain: a brief evidence update for the U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality. 2003. Available at http://www.preventiveservices.ahrq.gov.

Appendix A
U.S. Preventive Services Task Force—Recommendations and Ratings

The Task Force grades its recommendations according to one of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A. The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. *The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.*

B. The USPSTF recommends that clinicians provide [the service] to eligible patients. *The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.*

C. The USPSTF makes no recommendation for or against routine provision of [the service]. *The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.*

D. The USPSTF recommends against routinely providing [the service] to asymptomatic patients. *The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.*

I. The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. *Evidence that [the service] is effective is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.*

Appendix B
U.S. Preventive Services Task Force—Strength of Overall Evidence

The USPSTF grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good: Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair: Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor: Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

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