

WHAT'S NEW

From the U.S. Preventive Services Task Force

An Overview of Recommendations

AHRQ Publication No. APPIP02-0025

September 2002

Screening for Osteoporosis in Postmenopausal Women

Why Is Screening for Osteoporosis in Postmenopausal Women Important?

Osteoporosis is a condition marked by thinning and weakening of bones and can lead to fractures, loss of height due to compression of the bones in the spine, and pain. Currently, osteoporosis is most commonly diagnosed by finding an abnormal result on X-rays that measure bone mineral density.

Screening and treating women at risk for osteoporosis can help prevent fractures.

Osteoporosis and fracture are most common in older women and are due to gradual loss of bone after menopause. Fifty percent of all women who live to be 85 years of age will have

an osteoporosis-related fracture during their lives; 25 percent of these women will develop a deformity of the spine, and 15 percent will fracture a hip. Screening women at risk for osteoporosis can lead to early detection and treatment, thus preventing fractures.

Who Is at Risk for Osteoporosis?

Women are at greater risk for osteoporosis and fracture than men are because women's bones are less dense than men's bones. Risk for osteoporosis increases steadily and substantially with age. Women 65 or older are at greatest risk. Lower body weight is also consistently associated with osteoporosis, but to a lesser degree than age. Women weighing less than 132 lbs are at greatest risk; women 60 and older who weigh less than 154 lbs are at increased risk. Low weight, no current

use of estrogen, and age are incorporated into the 3-item Osteoporosis Risk Assessment Instrument (ORAI), which helps clinicians identify women younger than 65 who should be screened: <http://www.osteod.org/faq/screening/orai.shtml>

What Does the USPSTF Recommend?

The USPSTF recommends that women 65 and older be screened routinely for osteoporosis. For women at high risk for fractures, the USPSTF recommends that screening begin at age 60.

The USPSTF makes no recommendation for or against screening women aged 60-64 for osteoporosis if they are not at high risk for this condition. The Task Force makes no recommendation for or against screening women younger than 60.

What's New from the U. S. Preventive Services Task Force is a series of fact sheets based on recommendations of the U. S. Preventive Services Task Force (USPSTF). The USPSTF systematically reviews the evidence of effectiveness of a wide range of clinical preventive services—including screening, counseling, and chemoprevention (the use of medication to prevent disease)—to develop recommendations for preventive care in the primary care setting. **This fact sheet presents highlights of USPSTF recommendations on this topic and should not be used to make treatment or policy decisions.**

More detailed information on this subject is available in the Systematic Evidence Review, Summary of the Evidence, and USPSTF Recommendations and Rationale, which can be found on the Agency for Healthcare Research and Quality's (AHRQ) Web site (<http://www.preventiveservices.ahrq.gov>), through the National Guideline Clearinghouse (<http://www.guideline.gov>), in print through the AHRQ Publications Clearinghouse (1-800-358-9295 or ahrqpubs@ahrq.gov), and in the *Annals of Internal Medicine*. 2002;137:526-541.

www.ahrq.gov

Women aged 65 and older should be screened routinely for osteoporosis.

What Screening Tests Are Available?

Screening tests for bone mineral density can identify women at increased risk for a variety of fractures; these women then can be treated with medications to reduce that risk. Dual-energy X-ray absorptiometry (DXA) of the hip is the best predictor of hip fracture. Using DXA to measure bone density of the hand, wrist, forearm, and heel also appears to detect women who are at increased risk for fracture. Other tests to measure bone mineral density include ultrasound, radiographic absorptiometry, single energy X-ray, absorptiometry, peripheral dual-energy X-ray absorptiometry, and peripheral quantitative computed tomography.

What Treatments Are Available?

Biphosphonates, such as alendronate and risendronate; selective estrogen-receptor modulators (SERMs), such as raloxifene; calcitonin; and estrogen can

improve bone density and reduce risk for fractures. Each of these treatments has potential benefits and harms. Clinicians should discuss these with their patients and help them decide which treatment is best for them.

Clinicians should discuss the potential benefits and harms of each treatment with their patients.

How Do the Current USPSTF Recommendations Differ from Those of the Previous Task Force?

The previous Task Force found insufficient evidence to recommend for or against routine screening for osteoporosis in postmenopausal women. At that time, only estrogen was proven to reduce fractures in healthy women, but it was not clear that bone density screening was necessary to make decisions about hormone therapy. Since those recommendations were released in 1996, prospective trials have demonstrated that biphosphonates and SERMs reduce the risk for fracture in women who have osteoporosis but who haven't already had a fracture.

How Does This Recommendation Compare with Those of Other Groups?

The current USPSTF recommendation on osteoporosis screening in postmenopausal women is similar to the recommendations of 10 other major groups, including:

- American Academy of Orthopaedic Surgeons
- American Academy of Physical Medicine and Rehabilitation
- American Association of Clinical Endocrinologists
- American College of Obstetricians and Gynecologists
- American College of Radiology
- American College of Rheumatology
- American Geriatrics Society
- American Society for Bone and Mineral Research
- Endocrine Society
- National Osteoporosis Foundation

For more information on osteoporosis screening and treatment, contact the following organizations:

healthfinder™

<http://www.healthfinder.gov>

National Institutes of Health

<http://www.nih.gov>



U.S. Department of Health
and Human Services



Agency for Healthcare
Research and Quality
www.ahrq.gov



U.S. Preventive Services Task Force

Members of the USPSTF represent the fields of family medicine, gerontology, obstetrics-gynecology, pediatrics, nursing, prevention research, and psychology. Members of the USPSTF are:

Alfred O. Berg, MD, MPH
Chair

Janet D. Allan, PhD, RN, CS
Vice-chair

Paul S. Frame, MD

Charles J. Homer, MD MPH

Mark S. Johnson, MD, MPH

Jonathan D. Klein, MD, MPH

Tracy A. Lieu, MD, MPH

C. Tracy Orleans, PhD

Jeffrey F. Peipert, MD, MPH

Nola J. Pender, PhD, RN

Albert L. Siu, MD, MSPH

Steven M. Teutsch, MD, MPH

Carolyn Westhoff, MD, MSc

Steven H. Woolf, MD, MPH