

## Screening for Osteoporosis in Men: Recommendations from the American College of Physicians

*Summaries for Patients* are a service provided by *Annals* to help patients better understand the complicated and often mystifying language of modern medicine.

The full reports are titled “Screening for Osteoporosis in Men: A Clinical Practice Guideline from the American College of Physicians” and “Screening for Osteoporosis in Men: A Systematic Review for an American College of Physicians Guideline.” They are in the 6 May 2008 issue of *Annals of Internal Medicine* (volume 148, pages 680-684 and pages 685-701). The first report was written by A. Qaseem, V. Snow, P. Shekelle, R. Hopkins Jr., M.A. Forciea, and D.K. Owens, for the Clinical Efficacy Assessment Subcommittee of the American College of Physicians; the second report was written by H. Liu, N.M. Paige, C.L. Goldzweig, E. Wong, A. Zhou, M.J. Suttrop, B. Munjas, E. Orwoll, and P. Shekelle.

### Who developed these guidelines?

The American College of Physicians (ACP) developed these recommendations. Members of the ACP are internists—specialists in the care of adults.

### What is the problem and what is known about it so far?

Osteoporosis is a condition in which bones become less dense and bone fractures occur more easily. Osteoporosis is especially common in women after menopause. However, men also get osteoporosis as they age and can have osteoporosis-related fractures.

Two approaches can be used to prevent fractures from osteoporosis. One is to promote measures that prevent osteoporosis, such as adequate calcium and vitamin D intake, physical activity, and avoidance of tobacco and alcohol. Some drugs (bisphosphonates) can also prevent osteoporosis, but they are not recommended for general use because of side effects and expense. The second approach is to screen for osteoporosis. Screening means identifying persons with low bone thickness before they have a fracture. Those at high risk for fracture will benefit most from drugs that prevent fracture. Testing for osteoporosis involves measuring how dense bones are with a test called *dual-energy x-ray absorptiometry* (DXA). Dual-energy x-ray absorptiometry is a painless and noninvasive test that utilizes an open machine and uses x-ray beams to measure soft tissue and bone thickness. Newer tests involve the use of other x-ray techniques and ultrasonography.

The U.S. Preventive Services Task Force recommends bone thickness testing for women age 65 years or older and testing at younger ages for women who have risk factors for osteoporosis. However, it is uncertain whether men should also be screened for osteoporosis, so the ACP wanted to develop recommendations for screening in men.

### How did the ACP develop these recommendations?

The ACP reviewed published research to measure the benefits and harms of screening for osteoporosis in men.

### What did the authors find?

Good-quality studies showed that men who are older than age 70 years, have low body weight or weight loss, and are not physically active are at risk for osteoporosis. Other factors that increase a man’s risk for osteoporosis are previous fractures without substantial trauma, ongoing use of certain drugs (corticosteroids, such as prednisone, or drugs that are sometimes used to treat prostate cancer), diets low in calcium, cigarette smoking, and spinal cord injury.

The authors found that the best-quality studies that predicted fracture risk in men for testing bone thickness were done with DXA. Less is known about ultrasonography and other screening tests.

### What does the ACP recommend that patients and doctors do?

Doctors should periodically evaluate older men for osteoporosis risk factors. Because about 6 of 100 men have osteoporosis by age 65 years, it is reasonable to start screening for risk factors before this age.

The ACP recommends bone thickness measurement with DXA for men who have risk factors for osteoporosis and are willing and able to take drugs (bisphosphonates) to treat it.

More research is needed to evaluate osteoporosis screening tests in men.

### What are the cautions related to these recommendations?

The ACP may revise these recommendations as new information about osteoporosis in men becomes available.

Summaries for Patients are presented for informational purposes only. These summaries are not a substitute for advice from your own medical provider. If you have questions about this material, or need medical advice about your own health or situation, please contact your physician. The summaries may be reproduced for not-for-profit educational purposes only. Any other uses must be approved by the American College of Physicians.