

**Comments on the proposed USPSTF Draft Research Plan:
Screening for Osteoporosis to Prevent Fractures**

**Submitted by: Men's Health Network
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Men's Health Network (MHN) is a national non-profit organization whose mission is to reach men, boys, and their families where they live, work, play and pray with health awareness and disease prevention messages and tools, screening programs, educational materials, advocacy opportunities, and patient navigation.

MHN appreciates the opportunity to provide comments on the draft research plan developed by the United States Preventive Services Task Force (USPSTF) regarding osteoporosis screening. We applaud the USPSTF's B-grade for postmenopausal women under age 65 but have concerns about the I-grade for men because of the known risk factors for osteoporosis in men and the increasing incidence and mortality rates among males.

We thank you for considering the comments outlined below:

Increasing Incidence and Mortality

Based on evidence that we cite in our comments, we recommend that the USPSTF change the grade for screening men for osteoporosis from an "I" to a "B" for men aged 70 and older, and for men age 50-69 with certain risk factors, such as smoking, medications prescribed, low testosterone, and certain prostate treatments.

Osteoporosis is not just a woman's disease. According to the National Osteoporosis Foundation, up to one in four men over age 50 will break a bone due to osteoporosis. In addition, men have higher mortality rates than women as a result of osteoporotic bone fractures. And even more concerning, men die from these fractures at a higher rate than women.

A recent study showed that the mortality rate for men 1, 3, 6, 12, and 36 months after fracture was 13.7%, 25%, 32.7%, 43.3%, and 65.6%, respectively. Women experienced lower mortality rates in each measure of this timeframe. (Guzon-Illescas, O., et al., 2019). Furthermore, men who experience a hip fracture at age 80 have an excess annual mortality of 18%, 22%, 26% and 20% at 1, 2, 5, and 10 years after injury, respectively (Haentjens, et al., 2010). Many additional studies of osteoporotic fractures showed a similar trend in higher mortality rate in men than in women, including Schousboe, J.T. (2017); J. Steen Jensen & E. Tøndevold (1979); Jacqueline R Center, et al. 1999; Morin, S., Lix, L.M., Azimae, M. et al. (2011); and Eilif Dahl (1980).

The Guzon-Illescas study also lists several comorbidities and conditions that correlate with higher mortality from osteoporotic hip fractures including: kidney failure, heart failure, diabetes, and even the male gender itself. Data from the top ten causes of death show that men die at higher rates than women from all of these correlating comorbidities. With men living sicker and dying earlier, the USPSTF could best serve them by publishing a B-grade for male osteoporosis screenings.

Risk Factors

Despite osteoporosis being diagnosed more often in women, men are more likely to be disabled or die after experiencing an osteoporotic fracture. Men aged >70 are at significant risk for osteoporotic fracture. Men lose bone mass at a slower rate than women due to the more gradual lowering of testosterone, making it more difficult to identify in early stages. Gender adjusted screening methods can identify this bone loss.

For men with prostate cancer, approximately 248,530 new cases in 2021, the risk of osteoporosis is heightened because of the impact of cancer therapy on bone loss. Low testosterone levels are a known risk factor for osteoporosis in men. However, testosterone also drives prostate cancer, so reducing the level of this male hormone is a critical therapy in the advanced stages of this disease. For the hundreds of thousands of men now under treatment for prostate cancer, the risk of bone fracture is very high. However, if the osteoporosis is identified early enough, effective treatments exist and many osteoporotic fractures and subsequent medical costs can be avoided.

Aging men also experience decreased levels of bioavailable estrogen, similar to menopausal women, which increases the risk of fracture. (Riggs, et al., 1998)

Harms

There have been no identifiable harms associated with screening for osteoporosis in men.

However, there are significant harms from not screening:

- - Failure to identify the more gradual bone loss in men at an early stage when treatment can be most effective
 - Failure to identify critical bone loss in men who are taking certain medications or being treated for prostate cancer
 - Failure to identify critical bone loss that many result in a break and a significant decrease in the quality of life and/or death

In closing, our organization would like to applaud the USPSTF on the inclusion of postmenopausal women and encourage the Task Force to issue a B-grade for men because of the apparent risk factors, including age, age-related loss of testosterone, increasing mortality rates, and bone loss in other men with clearly definable risk factors.

The data presented in these comments seem to indicate that gender adjusted screenings for osteoporosis in men are warranted and should help men avoid crippling and deadly bone fractures. A B-grade from the USPSTF for male osteoporosis screenings can save lives.

Thank you for the opportunity to comment on this important topic that affects so many men, women, and their families.

Sincerely,

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