

Screening for Breast Cancer Final Recommendations BACKGROUND

Summary

Mammography is an important tool in reducing the number of deaths due to breast cancer. The science shows that screening is most beneficial for women ages 50 to 74. For women ages 40 to 49, it can also be effective, although the benefit is smaller than for older women, and the potential harms proportionally greater. For this reason, the decision whether and when to start screening for women in their 40s should be an individual one, recognizing the potential benefits as well as the potential harms. For women age 75 and older, the evidence about the overall benefit of mammography screening is unclear. The evidence on additional screening for women with dense breasts is also unclear. Older women and women with dense breasts should talk with their doctors to determine what is best for their individual health needs. In addition, the evidence is unclear on the effectiveness of 3D mammography screening. The Task Force is calling for more research in these areas. Women deserve the latest information about what science says about the benefits and harms of breast cancer screening so that together with their doctors they can make the best choice for themselves.

The Final Recommendations on Screening for Breast Cancer

After an in-depth review of the strongest available science on the benefits and harms of mammography screening, as well as input from the public and health care professionals, the Task Force issued the following final recommendations:

- The Task Force recommends mammography screening every two years for women ages 50-74. **This is a B recommendation.**
- The decision to start mammography screening in women prior to age 50 should be an individual one. Women between the ages of 40 and 49 who place a higher value on the potential benefit than the potential harms may choose to begin screening every two years. **This is a C recommendation.**
 - Mammography screening in women between the ages of 40 to 49 years may reduce the risk of dying of breast cancer, but the number of deaths averted by screening in this age range is smaller and the number of false-positive tests and unnecessary biopsies larger than in older women.
 - Women undergoing regular mammography screening are at risk for overdiagnosis and overtreatment. This means women may be treated for something that would not otherwise have become a threat to a woman's health during her lifetime.
 - Women with a parent, sibling, or child with breast cancer may potentially benefit more than average-risk women from beginning screening between the ages of 40 to 49 years.
 - For average-risk women ages 40 to 49 years, the net benefit of mammography screening is small.
- The current evidence is insufficient to determine the effectiveness of mammography screening in women 75 years of age and older. **This is an I statement.**
- The current evidence is insufficient to determine the effectiveness of digital breast tomosynthesis (3D mammography) as a screening method for breast cancer. **This is an I statement.**
- The current evidence is insufficient to determine the effectiveness of additional screening for breast cancer with an ultrasound, MRI, 3D mammography, or other methods for women who are found to have dense breasts, but have a negative mammogram. **This is an I statement.**

An explanation of the grades included in this final recommendation can be found under “U.S. Preventive Services Task Force Grade Definitions.”

Benefits and Harms of Screening

The evidence the Task Force reviewed shows that screening women ages 40 to 74 is effective in reducing the risk of dying from breast cancer, with women ages 50 to 74 benefiting most. Women get the best balance of benefits to harms when they are screened every two years.

Potential harms of mammography screening include:

- Overdiagnosis and overtreatment, meaning that a woman would undergo treatment for a tumor found by screening that would not otherwise have become a threat to her health, or even apparent, during her lifetime;
- False-positive test results, which can result in invasive follow-up testing, such as breast biopsies and psychological harms (such as anxiety); and
- False-negative test results or missed cancers.

Breast cancer caused by radiation, while infrequent, is another potential harm.

Additional Information

For more information on this topic, visit www.screeningforbreastcancer.org. This Web site includes a variety of materials to help health care professionals, stakeholders, and the general public understand the final recommendations. These materials include a video, answers to frequently-asked questions, and a Get the Facts sheet.

In addition, anyone who wishes to stay current on the Task Force's latest work can sign up for its [email list](#) to receive updates and announcements, including when draft research plans, draft evidence reviews, and draft recommendations are posted for public comment. The listserv also provides updates when final research plans, final evidence summaries, and final recommendations are available.

About the U.S. Preventive Services Task Force and Its Mission

The Task Force is an independent group of national experts in prevention and evidence-based medicine who work to improve the health of all Americans by making evidence-based recommendations about clinical preventive services, such as screening tests, counseling services, and preventive medicines. The Task Force is committed to providing recommendations based on the best available evidence to primary care professionals and to women, men, and their families, so that together they can make informed decisions about the potential benefits and risks of preventive services.

U.S. Preventive Services Task Force Grade Definitions

Grade	Definition
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.