

## New US breast cancer screening recommendations



All women should be screened for breast cancer every other year starting at age 40 years, according to a new draft recommendation from the US Preventive Services Task Force (USPSTF) published on May 9, 2023.

The USPSTF previously recommended biennial screening for all women aged 50–74 years, with those aged 40–50 years encouraged to make a decision with their physician. The USPSTF now recommends biennial screening mammography for women aged 40–74 years, including for individuals with a family history of breast cancer and those with other risk factors, such as having dense breasts. However, the recommendation does not apply to individuals with a high risk of developing breast cancer, such as those with *BRCA1* or *BRCA2* genetic mutations or people with a personal history of breast cancer.

Two major factors underpinned the decision to expand the recommended starting age for screening all women from 50 to 40 years. First, the incidence of breast cancer in US women aged 40–49 years has been gradually increasing, with an average annual increase of 2.0% noted between 2015 and 2019. The US Centers for Disease Control and Prevention estimate that around 9% of new breast cancers in women in the US occur in those younger than 45 years. Second, updated model-based estimates of the benefits versus harms of breast screening strategies obtained from a collaboration of breast imaging registries showed that biennial screening strategies starting at ages 40 or 45 years resulted in greater incremental gains in mortality reduction than strategies involving annual screening starting at age 50 years. The USPSTF concluded with moderate certainty that biennial screening mammography in women aged 40–74 years had a moderate net benefit.

Importantly, the modelling analysis examined outcomes specific to subgroups of women, including Black

women. Black women are more likely to be diagnosed with aggressive triple-negative cancers (oestrogen-receptor negative, progesterone-receptor negative, and HER2 negative), and have an approximately 40% higher risk of dying from breast cancer than White women. Results from the model suggested that biennial screening from ages 40–45 years could reduce the disparity in mortality rates to 30%. Wanda K Nicholson (Milken Institute School of Public Health, George Washington University, Washington, DC, USA), vice chair of the USPSTF commented “Breast cancer is the second most common cause of cancer deaths in women. We now have new and more inclusive science that enables us to expand our prior recommendation and encourage all women to get screened every other year starting at age 40. This new approach has the potential to save nearly 20% more lives and has even greater potential benefit for Black women, who are much more likely to die from breast cancer.”

Although the USPSTF is clear in their recommendation to screen every other year starting at age 40 years for women in general, their draft states that there is not enough evidence at present to make additional screening recommendations for specific populations. More studies are required around different screening strategies for women with dense breast tissue (which is associated with an increased risk of breast cancer), women older than 74 years, and Black women, before specific screening guidance can be issued for these groups.

Additionally, there is a disparity between the USPSTF and some other professional bodies regarding the recommended frequency of screening. The USPSTF state in their draft review of the scientific evidence that women benefitted most when they were screened for breast cancer every other year; however, the American College of Radiology and the Society of Breast Imaging have issued a joint statement

urging the USPSTF to recommend annual screening. Lajos Pusztai (Yale Cancer Center, New Haven, CT, USA) echoed this statement, commenting “The new [USPSTF] guidelines are well intentioned and motivated by a desire to address early diagnosis and treatment of triple-negative breast cancer that is more common among younger Black women. However, this measure is unlikely to accomplish much with [biennial] screening. Annual screening is biologically a more appealing prevention strategy for rapidly proliferating cancers like triple-negative breast cancers.” However, the USPSTF highlighted to *The Lancet Oncology* that “While annual screening might find some cancers earlier, it is not clear whether it would improve women’s health or change the way their cancer progresses, and would subject them to about 50% more false-positive results and 50% more unnecessary exposure to potentially harmful breast cancer treatments.” Clearly more research is urgently needed to better understand screening requirements for different populations of women, to reduce the disparities in breast cancer mortality rates, and to fill gaps in the evidence that will in turn enable health equity gaps to be addressed.

The draft recommendations from the USPSTF are posted publicly for comment until end of June 6, 2023.

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This online publication has been corrected. The corrected version first appeared at [thelancet.com/oncology](https://www.thelancet.com/oncology) on June 1, 2023

For the draft recommendation statement from the USPSTF see <https://www.uspreventiveservicestaskforce.org/uspstf/draft-recommendation/breast-cancer-screening-adults>

For US Centers for Disease Control and Prevention estimates see [https://www.cdc.gov/cancer/breast/young\\_women/bringyourbrave/breast\\_cancer\\_young\\_women/](https://www.cdc.gov/cancer/breast/young_women/bringyourbrave/breast_cancer_young_women/)

For the USPSTF draft modelling report see <https://www.uspreventiveservicestaskforce.org/uspstf/document/draft-modeling-report/breast-cancer-screening-adults>

For the USPSTF draft evidence review see <https://www.uspreventiveservicestaskforce.org/uspstf/document/draft-evidence-review/breast-cancer-screening-adults>

For the American College of Radiology and the Society of Breast Imaging joint statement see <https://www.acr.org/Media-Center/ACR-News-Releases/2023/ACR-SBI-Statement-on-New-USPSTF-Breast-Cancer-Screening-Recommendations>



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