SOCIETY OF BREAST IMAGING
SINCE 1985

Facts About Screening: Talking Points

Annual Screening Mammography Starting at Age 40

- Annual screening mammography starting at age 40 results in the greatest mortality reduction, the most lives saved, and the most life years gained (LYG). This is why the ACR/SBI recommends annual mammography in women 40-and-older (including 40–49).
- Annual screening results in more lives saved from breast cancer than biennial screening.
- For Black, Hispanic, and Asian women, one-third of all breast cancers are diagnosed under age 50. In White women, about one-quarter of breast cancers are diagnosed under age 50. There is also a higher incidence of aggressive hormone receptor negative and triple-negative breast cancers in Black women compared to White women. Therefore, starting breast cancer screening at 40 is especially important for non-white women.
- Breast cancer incidence increases significantly by age 40. The incidence rate for ages 40–44 is twice that for ages 35–39 (122.5 vs 59.5 per 100,000 women). For ages 45–49 it is 188.6 per 100,000 women; it continues to increase until age 80. Beginning screening mammography at age 40 is supported by science.
- One in six breast cancers occur in women aged 40–49.
- Forty percent of all the years of life saved by screening mammography are among women in their 40s.
- The years of life lost to breast cancer are highest for women in their 40s.
- A 10-year review of breast cancer outcomes showed that disease-free survival and overall survival were significantly higher in women aged 40–49 with screen-detected breast cancers versus non-mammographically-detected breast cancers.

Survival and Treatment Benefits

- In addition to improving survival from breast cancer, early detection through screening mammography reduces the need for aggressive therapy, allowing for less invasive surgeries (lumpectomy instead of mastectomy; avoiding axillary lymph node dissections) and decreasing the need for systemic chemotherapy.
- Using the same available treatments, women with screen-detected cancers had a 60% lower mortality at 10 years of follow-up and 47% lower mortality at 20 years of follow-up compared to unscreened women. (Tabar et al)

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Evidence from Screening Trials

- The largest (Hellquist et al) and longest running (Tabar et al) breast cancer screening trials in history have confirmed that regular mammography screening cuts breast cancer deaths by roughly a third in all women ages 40 and over (including women ages 40–49).
- The Pan-Canadian Mammography Study (Coldman et al) involved over 2.7 million women screened in Canada and showed an average mortality reduction of 40%, in women 40–49 and older age groups.
- The U.S. Preventive Services Task Force (USPSTF) acknowledges an increase in total number of lives saved and life-years gained in women who undergo annual mammography screening and start at age 40.

Screening Over Age 75

- Screening performance improves in this age group, with a higher cancer detection rate, higher sensitivity, higher specificity, and lower false positive rate compared to screening in women under age 75.
- For women over age 75, those with screen-detected cancers had significantly fewer aggressive surgeries, less chemotherapy, and better 5-year disease-specific survival compared to those with clinically-detected breast cancers.
- 98% of women over age 75 with screen-detected breast cancer wished to pursue surgical intervention for their cancer, indicating a preference for treatment in this age group when the cancer was detected early.

Screening for Transgender Patients

- Annual screening starting at age 40 for transfeminine patients (male to female) with 5 years or more of hormone use.
- If elevated risk due to family history or genetic predisposition, for transfeminine patients, consider screening at age 25–30 and even if less than 5 years of hormone use.
- Annual screening starting at age 40 for transmasculine patients (female to male) who have not had bilateral mastectomies.
- If elevated risk, for transmasculine patients, consider screening at age 25–30 and supplemental screening breast MRI (same as cisgender women).

Mammography Radiation Risk

- Mammography uses ionizing radiation. Ionizing radiation is carcinogenic at high doses. Breast MRI and ultrasound do not use ionizing radiation.

- The carcinogenic risk of low-dose radiation (effective doses below 100 mSv) is negligible. No radiation-induced cancers have been observed at such low doses. All radiology imaging exams, including mammograms, are well below this 100 mSv threshold.
- The effective dose from digital mammographic screening is approximately 0.5 mSv. Annual background radiation in the United States is approximately 3.1 mSv. Thus, digital mammograms are equivalent to 8 weeks of background radiation.
- The significant mortality benefit of early breast cancer diagnosis outweighs the small theoretical carcinogenic risk of radiation from mammography.
- Tomosynthesis adds a radiation dose equal or up to 1.5x conventional digital mammography. Thus, combination digital mammography + tomosynthesis results in an overall radiation dose double that of conventional digital mammography alone. Using synthetic 2D mammography reduces the radiation dose by almost half (i.e., overall dose is similar to conventional digital mammography alone).
- Thyroid shields are unnecessary during mammograms because the thyroid dose from scatter radiation is exceedingly small.

Legislative Updates

Find It Early Act

- This bill will help address insurance barriers to breast cancer screening.
- The result will be earlier detection of breast cancer in women with dense breasts or at increased risk.
- It would require insurers to cover additional breast imaging after a mammogram, with no out-of-pocket costs for women with dense breasts or at higher risk (for example, BRCA or other disease-causing mutation carriers, those with family/personal history of cancer, or other reason).

Access to Breast Cancer Diagnosis (ABCD) Act

- The Access to Breast Cancer Diagnosis (ABCD) Act is a bipartisan bill introduced into Congress. The bill would require full insurance coverage for diagnostic and supplemental breast imaging exams, with no out-of-pocket patient costs.
- ·Proposed covered diagnostic imaging exams include any imaging to further evaluate abnormalities seen on screening mammography or to further evaluate any clinically-detected abnormality, as deemed appropriate by NCCN guidelines.
- Proposed covered supplemental breast imaging exams include any exam deemed appropriate for supplemental breast cancer screening per NCCN guidelines.

Currently under congressional review, as of Fall 2026