

Mammography is a method of examining the breasts by using low-dose x-ray. Currently it is the best screening method widely available. It is generally agreed that screening mammograms— x-rays given to healthy women without any symptoms— reduce the breast cancer death rate in women over 50. There has been much debate about use of mammograms to screen women aged 40 to 49. To make an informed decision about mammograms, women must be aware of the following facts:

Mammograms do not prevent breast cancer.

They detect cancer that already exists. Most breast cancers have been present for six to eight years by the time they appear on mammograms.ⁱ

Mammography is a form of ionizing radiation.

Radiation is a known cause of cancer, and the effects of small amounts may accumulate in the body. This does not mean you should never have an x-ray, but rather that you should be thoughtful of your exposure to radiation. The risk of harm from radiation is highest in tissue where cells are rapidly changing, such as the growing breast tissue of adolescent females.ⁱⁱ

The quality of a mammography screening varies widely.

Quality depends on many factors including the age and maintenance of the equipment, and the expertise of the radiologist who interprets the films. For your first mammogram, do not hesitate to ask to meet with your radiologist to discuss how readable your mammogram is or isn't. Newer machines are tested to ensure they emit lower amounts of radiation. To check if a center is accredited by the American College of Radiology, call 1-800-4-CANCER.

Mammography is a flawed test.

It misses 10% of all tumors, and 25% of tumors

in women younger than 50.² In addition, "false positives" cause women under 50 who have mammograms to be twelve times more likely to have unnecessary biopsies than women over 50.ⁱⁱⁱ Pre-menopausal women are more likely to have dense breast tissue, which appears white on an x-ray, as does cancer.

Mammography has been proven to lower mortality only in women ages 50 to 65.

If every woman in this age group had an annual mammogram, the breast cancer mortality rate could be reduced for this group by as much as one third. Yet for women between 40 and 49, trials have shown no consistent effect on mortality.^{iv} Healthy women younger than 50 should not have mammograms as a routine matter. The risk of radiation, combined with the high incidence of both false negatives and false positives, means that routine mammography for women under 50 may well do more harm than good.

Mammograms should be *part of*, rather than *all of*, a breast cancer detection program.

Mammograms should be combined with monthly breast self-exams and annual clinical exams by trained professionals.

ⁱ Love, S. with Karen Lindsey, *Dr. Susan Love's Breast Book, 4th Edition*, p.232. Merloyd Lawrence, 2005.

ⁱⁱ *Ibid.*, p.99.

ⁱⁱⁱ Love, S. with Karen Lindsey, *Dr. Susan Love's Breast Book, 2nd Edition*, p.258. Merloyd Lawrence, 1998.

^{iv} In *Dr. Susan Love's Breast Book, 4th Edition*, from Fletcher, SW. et al. Report of the International Workshop for Screening for Breast Cancer. *Journal of the National Cancer Institute* 1993; 85(20):1644.