

"SHOULD I GET A MAMMOGRAM?"



Understanding the
HARMS AND BENEFITS
of Routine Breast Cancer Screening

This brochure provides information about routine screening mammography for **women at average risk** of breast cancer who do not have a significant family history of breast cancer, have not been diagnosed with breast cancer, and have no other known risk factors.

The goal of routine breast cancer screening is to prevent women from dying of breast cancer. Yet studies have shown that the popular claim "early detection saves lives" is not actually true.

Routine screening for breast cancer also comes with significant harms, including false positives, overdiagnosis, overtreatment and more.

BALANCING THE HARMS AND BENEFITS OF MAMMOGRAPHY SCREENING IS A PERSONAL DECISION

that happens in consultation with your healthcare provider.

* false positives, overdiagnosis, overtreatment

USES OF MAMMOGRAPHY

Mammography is the primary screening technology used to detect breast cancer. It is used in several ways:

- For routine screening of women with no observable signs or symptoms for the **early detection** of breast cancer
- As a **surveillance** tool to closely watch women at high risk for breast cancer
- As a **diagnostic** tool to follow up on an abnormality found during a physical examination performed by a woman or a medical provider, or on a screening mammogram



Mammography as a **surveillance** and **diagnostic** tool has benefits for women. This brochure focuses solely on mammography used as a screening tool for **early detection**.

THE FALSE PROMISE OF EARLY DETECTION

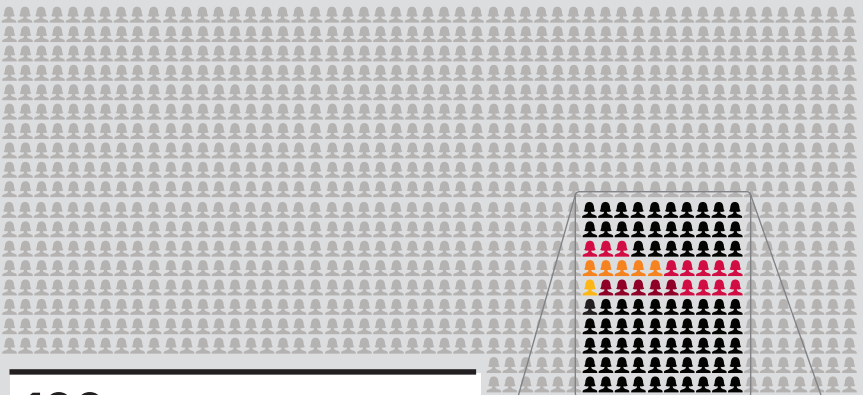
Breast cancer is a complex disease. No matter which screening technology is used, early detection **does not live up to** the promise of saving more lives. While some breast cancers may never become life-threatening, others are so aggressive that current treatments are ineffective, no matter how early the cancer is detected.

Although routine screening mammography does find early stage breast cancer, the growing data shows that it **does not reduce the number of women who die from the disease**. In fact, one of the largest studies to date found there is no difference in death rates for women at average risk who have been screened versus those who have not.¹

While advances in treatment have produced important reductions in breast cancer deaths, there still remain too many deaths from this disease—and routine screening is not the answer to this devastating epidemic.

1. Anthony B Miller, Claus Wall, Cornelia J Baines, Ping Sun, Teresa To, Steven A Narod, Twenty five year follow-up for breast cancer incidence and mortality of the Canadian National Breast Screening Study: randomised screening trial. BMJ Feb 2014; 348: g366

If a group of 1,000 50-year-old women is screened over the next ten years...



100 will receive false positives.

23 will be diagnosed with breast cancer.

5 will likely die with or without screening.

1 will die without screening.

5 will be diagnosed with cancer that will never be life-threatening or require treatment.



RISKASSESSMENT

★ Many women overestimate their risk of breast cancer and underestimate the harms of routine mammography screening. Although medical practitioners estimate a woman's risk based on risk factors such as age and family history, accurately assessing an individual woman's breast cancer risk is difficult.

For some women, routine screening for breast cancer relieves anxiety about the disease. For others, screening increases anxiety and leads to unnecessary medical procedures that take a lasting physical and emotional toll.

OVERANDUNDERESTIMATING BREASTCANCERRISK

PERCEIVED RISK

A 40-year-old's chance of developing breast cancer over the next decade:

20-50%

Out of 1,000 women, **160** would die without screening.

With screening, the number of breast cancer deaths decreases by

50%

WHAT'S
MY RISK OF
BREAST
CANCER?

ACTUAL RISK

The chance of a 40-year-old woman getting breast cancer over the next decade:

1.4%

according to the National Cancer Institute

Of 1,000 50-year-old women, about **FIVE** are likely to die of breast cancer in the next ten years. With screening, it drops to **FOUR**.

ACTUAL REDUCTION OF DEATH WITH SCREENING

AGES 40-49

.05%

AGES 50-59

.2%

1. National Cancer Institute. Factsheet: Breast Cancer Risk in American Women. Accessed from <http://www.cancer.gov/cancertopics/factsheet/detection/probability-breast-cancer>
2. Herman JD, Herman SM: Women's understanding of personal breast cancer history. Does ethnicity matter? 2013 Breast Cancer Symposium. Abstract 4. Presented September 7, 2103.
3. Domenighetti, G., D'Avanzo, B., Egger, M., Berrino, F., Perneger, T., Mosconi, P., and Zwahlen, M. Women's perception of the benefits of mammography screening: population-based survey in four countries. *Int. J. Epidemiol.* (2003) 32 (5): 816-821
4. Biller-Andorno, N. and Jüni, P. Abolishing Mammography Screening Programs? A View from the Swiss Medical Board. *N Engl J Med* May 2014; 370:1965-1967
5. Woloshin, S. and Schwartz, L.M. The Benefits and Harms of Mammography Screening: Understanding the Trade-offs. *JAMA.* 2010;303(2):164-165.
6. Domenighetti, G., D'Avanzo, B., Egger, M., Berrino, F., Perneger, T., Mosconi, P., and Zwahlen, M. Women's perception of the benefits of mammography screening: population-based survey in four countries. *Int. J. Epidemiol.* (2003) 32 (5): 816-821

UNDERSTANDING THE HARMS OF SCREENING **MAMMOGRAPHY**

All medical tests and procedures come with a range of possible harms and risks. The harms of routine mammography screening include:

Overdiagnosis

The identification of a cancer that is not life-threatening. According to one of the largest studies of screening mammography, around 1 in 5 breast cancers found via routine screening mammography represent overdiagnosis. Overdiagnosis usually leads to overtreatment.

Overtreatment

The treatment of cancer that will likely never cause symptoms or become life-threatening. Overtreatment also occurs when a woman is treated for breast cancer—but the treatment does not change how long she lives. Because medical providers cannot tell which breast cancers may become life-threatening, they treat all breast cancers that they detect.

False positive

When a healthcare provider believes, based on a mammogram result, that a woman may have breast cancer when she does not. False positives lead to stress, financial costs, and invasive procedures. }

False negative

When a woman receives a “normal” mammogram result even though cancer is present. Routine screening mammograms miss about 20 percent of invasive breast cancers.

ISSUES FOR UNDERSERVED AND VULNERABLE COMMUNITIES

Diverse communities are affected differently by breast cancer. From the needs of transgender people to women of color to people exposed to environmental toxins, research about the risk and needs of these communities is sparse and, in some cases, nonexistent. As a result, people from some communities do not know if screening recommendations published for “average-risk women age 40 years and older” apply to them.

{ Including underrepresented communities in studies on breast cancer and screening is critical to establishing evidence-based guidelines for all communities, including underrepresented communities.



Photo by Raymond Rodriguez

YOUR HEALTH IS IMPORTANT. WHAT CAN YOU DO?

Know your body.

Get suspicious lumps or symptoms—such as an unusual change in the shape or size of your breast, nipple discharge, or pain—checked out by a trained medical practitioner. Diagnostic mammography used in these cases can be a beneficial tool.

Know your choices.

Partner with your medical provider to understand your risk. Understand the harms and benefits of screening mammography so that you can make a choice that is right for you.

WHERE DO WE GO FROM HERE?

Routine mammography screening does not stop women from dying of breast cancer. In light of the evidence, we need:


✦ To shift the focus away from early detection and toward **preventing** breast cancer from developing in the first place

To develop **more effective, less toxic, and affordable treatments** for breast cancers that threaten women's lives

✦ **Balanced information** about the harms of overtreatment and overdiagnosis so that women can make informed choices

✦ **Accurate** risk-assessment tools to help women and their medical providers make informed decisions about screening

✦ **Evidence-based** guidelines for all communities—including underrepresented communities



Regardless of whether breast cancer is discovered by a screening mammogram or a woman finding her own lump, the best way to prevent death from breast cancer is by providing high-quality, evidence-based health care and treatment, delivered in a timely and culturally sensitive way.

ABOUT BREAST CANCER ACTION

Breast Cancer Action's mission is to achieve health justice for all women at risk of and living with breast cancer. We believe that breast cancer is a public health crisis and a social justice issue, and we envision a world where lives and communities aren't threatened by breast cancer.

Breast Cancer Action avoids conflicts of interest in our work by refusing funding from the "cancer industry," including pharmaceutical and chemical companies, enabling us to retain an independent voice and offer truly unbiased information



**BREAST
CANCER
ACTION**

657 Mission Street, Suite 302
San Francisco, CA 94105
Phone: 415-243-9301
Toll Free: 877-2STOPBC
Fax: 415-243-3996
info@bcaction.org

*health justice
for all women!*

www.bcaction.org