



Alliance Obstetrics and Gynecology

Breast Cancer Awareness Month

WHAT'S THE GOOD NEWS ABOUT BREAST HEALTH

Here is information on advances in screening techniques for earlier diagnosis, and preventive interventions to reduce your risk.

INCIDENCE – what is the chance I will get breast cancer?

The rate of breast cancer in the US has declined since 2004. This drop is due in part to women going off long-term hormone therapy after the results of the Women's Health Initiative were announced in 2002. Also screening and prevention are improving across the board, as well as better identification of high-risk women for special intervention.

To calculate your risk of breast cancer go to www.cancer.gov/bcrisktool/ and plug your numbers into the Gail Model. This tool does not take into account more distant relatives with breast cancer, such as aunts and grandmothers, or a family history of ovarian cancer, so ask us about more accurate ways to screen you if you have this history.

Age is the biggest risk factor for breast cancer, so keep getting annual mammograms as you age.

CHANCE OF DEVELOPING INVASIVE BREAST CANCER BY AGE

Current Age (years)	Chance of cancer in next 10 years
20	1 in 1837
30	1 in 234
40	1 in 70
50	1 in 40
60	1 in 28
70	1 in 26
Lifetime risk	1 in 8

RISK FACTORS – can I improve my chances?

● There are things about YOU that increase or decrease your risk – some of these things are under your control, and some are not.

Things we can't change include

Genetics: Family history of breast cancer, or carrying the “breast cancer gene” (BRCA1 or BRCA2)

Age: Getting older is good (it beats the alternative!) but it does increase your risk.

Chest irradiation: Survivors of Hodgkin's or other malignancies that underwent radiation therapy to the chest are at especially high risk for breast cancer. (Mammography does NOT increase the risk because it is so low dose, multiple CT scans might)

Previous breast biopsy with atypical cells found: increases your risk sharply

Hormonal factors: Early age at first period, late menopause increase risk, high bone density post-menopausally

Dense breast tissue: very dense breasts on mammography increase your risk, plus the mammogram is harder to read, so cancers are both more frequent and found later

Height: Tall women have more breast cancer

Things that may be under our control include

Hormonal factors: Long-term (> 4 years) post-menopausal hormone replacement therapy use, recent birth control pill use (in the last 2 years), late age at first live birth (> age 30) or no live births all increase risk. Breast-feeding reduces risk.

Body Mass Index: Obese women have more breast cancer, thin women are affected more harshly by hormone replacement therapy.

Dietary factors: Data is conflicting because this is hard to study, but it appears that fat intake is NOT related to breast cancer. High amounts of vegetables appear to reduce risk, as does vitamin D, calcium and folate intake. Higher alcohol intake (2 or more drinks per day) increases risk.

Exercise: We have “incontrovertible” evidence that exercise reduces the risk of getting breast cancer. If you get breast cancer, exercise reduces your risk of dying from it. Expending 10 – 20 met-hours per week reduces your risk of getting breast cancer by 10%, and expending 40 or more met-hours per week reduces your risk by 25%! (Walking at an average pace for 1 hour = 3 met-hours, jogging = 7, running = 12). If you have had breast cancer, expending 3 – 9 met-hours per week improves your survival by 20%, and if you expend 10 – 15 met-hours per week your survival is increased by 50%!

HOW IMPORTANT ARE THESE RISK FACTORS?

FACTORS THAT QUADRUPLE YOUR RISK (or more)

- Age 65 or older
- BRCA mutation
- 2 or more relatives diagnosed at an early age
- Personal history of breast cancer
- High breast tissue density
- Atypical biopsy
- Chest radiation therapy

FACTORS THAT DOUBLE YOUR RISK

- 1 sister or mother with breast cancer

FACTORS THAT MILDLY INCREASE YOUR RISK

- High post-menopausal bone density
- Hormonal factors
- Dietary factors
- Exercise

What is the best screening routine?

The best screening routine for you depends on your risk. If you are average risk or below, you should have a **mammogram** every year starting at age 40.

- → Regular mammograms reduce your risk of ever dying of breast cancer by one third!
- → only 20% of early breast cancer can be found on physical exam, but 50% can be found on mammogram
- → “false positive” rate is 11% (recall exams that do not result in a diagnosis of cancer)

●What about **ultrasound**? Ultrasound can be used for screening (scan both breasts in women with normal mammograms and physical exams to look for cancer) or for diagnosis (scan an area where there is a change on mammogram or physical exam). Screening mammograms have a very high false positive rate and are not recommended for this purpose. If you have an abnormal mammogram, or a lump with a normal mammogram, ultrasound can be very useful.

●If you are high risk, you should discuss the use of **breast MRI** with your health care provider. MRI is extremely sensitive for the diagnosis of breast cancer (98% of the time, if you have breast cancer your MRI will be abnormal). But the false positive rate is quite high – so many more women who are healthy will be told their test is abnormal than with mammography. This leads to worry, more biopsies, more expense – so for now, MRI is reserved for high risk women. Currently, you should consider breast MRI if

- your lifetime risk of breast cancer is > 20% (yearly starting age 25)
- you had chest radiation therapy (yearly starting age 25)
- you have adenocarcinoma of unknown primary
- you have newly diagnosed breast cancer (before treatment) – because the risk of finding cancer in the other breast is about 5%
- other screening is inconclusive

Remember that MRI does not replace mammography – the mammogram is better at detecting pre-invasive cancer (DCIS, LCIS) than MRI – so you need both.

Don't forget **self breast exam** – only 85% of breast cancer shows up on mammogram – some of the tumors are invisible even if they're as big as a walnut! So check your buddies every month and report lumps to your health care provider.

Prevention

Everyone can eat healthy, exercise, limit post-menopausal hormone therapy use, take calcium and vitamin D. For very high risk women, the use of medications called SERMs (selective estrogen receptor modulators) can reduce breast cancer by 50%. They have some risks, but are generally well tolerated and safe. Ask your health care provider to discuss this option if you qualify.

We'll report the latest again next year in October – in the meantime, talk to us about your concerns so we can individualize your care and give you the best outcome possible. For more information go to www.komen.org or www.nationalbreastcancer.org/ .