Dense Breasts

Q&A GUIDE

NATIONAL BREAST CANCER FOUNDATION, INC.®

Dense Breasts Q&A Guide

A NOTE FROM THE EDITOR

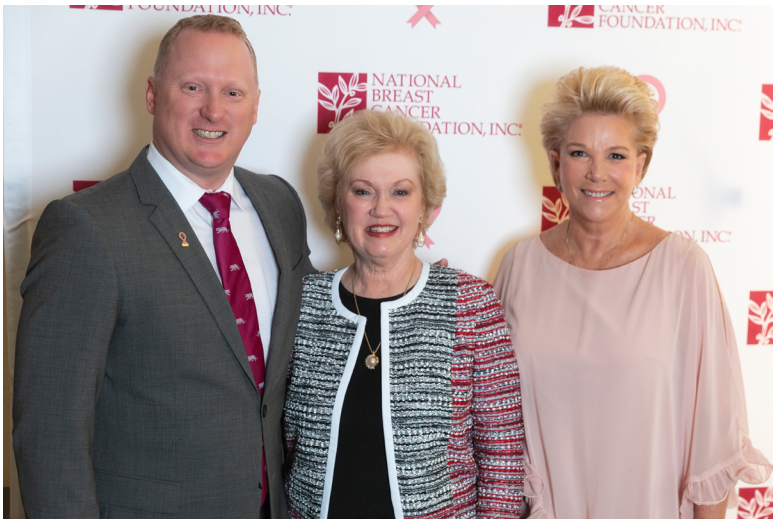
Dense breasts is a topic many women hear about, but aren't sure exactly what it means or how it impacts their overall breast health. This was the case for Joan Lunden, longtime Good Morning America anchor and Stage 2 triple negative breast cancer survivor.

As the honored speaker at NBCF's Women of Hope Luncheon, Joan shared about her journey, her work to bring awareness to breast density, and reminded us all that when we share our stories, others learn.

In 2014, facing months of aggressive chemotherapy treatments, Joan persevered to be called a survivor. She soon realized no one told her about risk factors that could've led to her diagnosis or could lead to recurrence. She learned by chance that she had dense breast tissue – something many women today still don't know.

Reflecting on her journey, Joan shuddered to think what her cancer would've looked like without early detection and the knowledge she gained along the way. She is an advocate for women everywhere, knowing how confusing and frustrating the healthcare system can be. She encourages women to be proactive with their health, be their own best advocates, and fight for better access to care.

Joan captivated an entire room with her story and is the inspiration behind this guide. May it empower, enlighten, and encourage women everywhere.



Joan Lunden (right) with NBCF Founder Janelle Hail & President Kevin Hail.

"I could have very easily walked out of the 3D mammogram that day thinking that I was perfectly fine, when I really had a fast-growing aggressive tumor in my right breast. Had I not been informed, I never would have known to ask for an ultrasound as well. Early detection can absolutely save your life - it saved mine."

– Joan Lunden

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What are dense breasts?

Every breast has a different mixture of breast tissue or variations of amounts of fatty and fibroglandular tissue. Broadly, breast tissue may be referred to as non-dense (more fatty) and dense (less fatty with more fibroglandular tissue). Dense breast tissue simply means there is more fibroglandular tissue, which appears white on a mammogram. When a patient has dense breasts, a mammogram will show that a greater amount of the breast is filled with dense breast tissue than fatty tissue.

How do women know if they have dense breasts?

Having a mammogram is the best way to find out if dense breast tissue is present. A radiologist (doctor who views mammograms) will analyze the ratio of fatty tissue to dense tissue and determine the level of breast density.

On a mammogram, fatty tissue appears dark, while dense breast tissue appears white. Dense breast tissue isn't transparent like fatty tissue, often making it difficult to see through.

Breast density levels are reported using the Breast Imaging Reporting and Data System (BI-RADS).

Density levels are often recorded in mammogram reports using letters (A-D):

A: Almost entirely fatty indicates that the breasts are almost entirely composed of fat. Found in about 10% of women.

B: Scattered areas of fibroglandular density indicates there are some scattered areas of density, but the majority of the breast tissue is non-dense. Found in about 40% of women.

C: Heterogeneously dense indicates that there are some areas of non-dense tissue, but that the majority of the breast tissue is dense. Found in about 40% of women.

D: Extremely dense indicates that nearly all of the breast tissue is dense. Found in about 10% of women.

Typically, women with heterogeneously dense (C) and extremely dense (D) breast types are considered to have dense breasts.

A B C D

Each state differs, but in some states it's a law that patients are notified via a letter if they have dense breast tissue. This lets the woman know that if she has dense breast tissue, the accuracy of her mammogram is less than that of a woman with a lower density.

In some cases, the verbiage included in the breast density notification letter shares that there are supplemental imaging options to undergo in addition to the mammogram, such as breast ultrasound or MRI, which could help with cancer detection in women with dense breasts.

If the patient lives in a state where notification about dense breast tissue isn't required, they can still advocate for themselves. In most instances, a patient's breast density is included in the mammogram report. A patient's results may not be mailed, but they can always ask for a copy of the report to see what type of breast tissue they have. If a patient has trouble finding this information or doesn't understand something, she should consult with her healthcare team. A good place to start is asking the ordering physician, "What kind of breast tissue do I have?".

Tip: Be your own best advocate. Ask for copies of your reports and medical records to better understand your breast health.

How common are dense breasts?

According to the National Cancer Institute, nearly half of all women age 40 and older undergoing mammograms have dense breasts.

Breasts change over time due to hormones. Before having children or before menopause, a lot of women's breasts are dense. After having kids or going through menopause, breasts change and tend to become more fatty. Women may even personally go through variations of breast density, from dense, to average, to fatty. For this reason, it's important to be diligent throughout the years asking about breast density. Information that was shared 10-20 years ago may not hold true.

Tip: Keep your breast health at the forefront as your body changes.

What contributes to having dense breast tissue?

Everyone has a different genetic makeup and disposition as to whether they'll have dense breasts or fatty breasts. Most people start with dense breast tissue and as they age or experience hormonal changes, the dense tissue turns to fatty tissue.

Other factors include:

- **Genetics.** Dense breast tissue has been shown to be genetic or influenced by genetic factors. Women should familiarize themselves with their family history to stay proactive with their health.
- **Low body mass index.** Undergoing weight loss can increase the amount of dense breast tissue with respect to amount of fatty tissue in a woman's breast. This is an area of ongoing research as well.
- **Hormonal therapy.** Outside factors, like hormonal therapy, can cause dense breast tissue to either remain or increase. Women on hormonal therapy should be especially diligent with their mammograms.

Tip: Share this guide with female family members to begin the discussion on breast health.

Do dense breasts feel different when performing a breast self-exam?

Only a mammogram can show if a woman has dense breasts. However, sometimes with dense breasts, the breast can feel lumpy, which can make it hard to find a mass. This is why it's recommended for women to perform breast self-awareness techniques in multiple different positions (in the shower, upright, and laying down) to properly assess any areas of concern. Any concern (specifically a discrete mass, lump, or area of firmness) should be brought to the attention of a physician, as imaging can provide insights on suspicious areas.

Tip: Familiarize yourself with breast self-awareness with our free guide, 3 Steps to Early Detection.

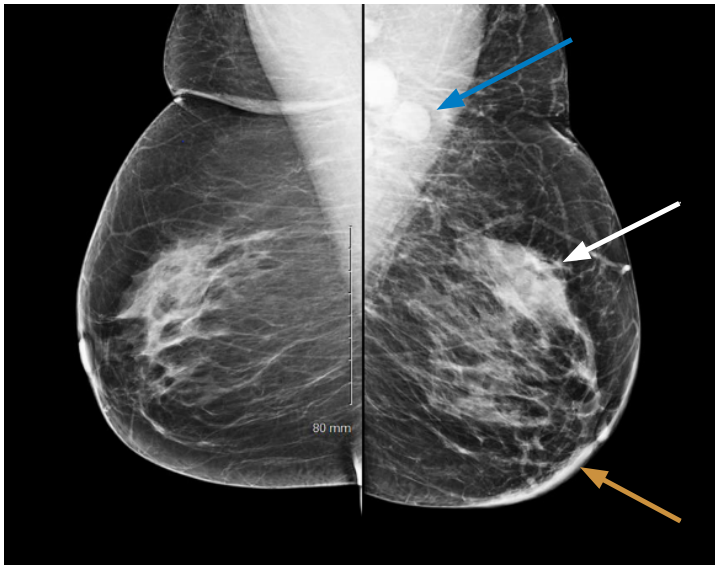
Does having dense breasts increase the likelihood of developing breast cancer?

Breast density affects the risk of breast cancer for women in two ways:

- Breast density can have a masking effect on detection of underlying cancer on a mammogram
- Breast density is an independent risk factor for breast cancer

Breast density refers to the relative amount of dense tissue (appearing white on a mammogram) compared with the amount of fatty elements (appearing dark) seen on a mammogram. As the white appearing areas on the mammogram increase, the dense breast tissue could mask the detection of breast cancer, as abnormal breast changes and cancer also appear white on a mammogram.

Below are 2 views from a mammogram, showing the right and left breasts.The white arrow in the breast shows a cancer, which is very subtle within the fibroglandular tissue. In this case, there are also prominent lymph nodes (blue arrow) and also skin thickening (gold arrow).



Breast density itself is also an independent risk factor for breast cancer. This means women with dense breasts have a higher risk of developing breast cancer than women without dense breasts, and the risk increases with increasing breast density.

Is additional screening needed if a patient has dense breasts?

Due to increased risk factors with dense breasts, there has been increased reporting of breast density to patients and clinicians. This has led to a need to evaluate when and how to best offer supplemental screening to women with dense breasts.

Remember: Despite concern of possible masking in women with dense breast tissue, mammography is recommended for all women of screening age, independent of breast density and breast cancer risk. Mammography alone has reduced the mortality (death rate) from breast cancer due to early detection of breast cancers, before there is chance of spreading or metastasis.

Women who have dense breasts and are only getting a mammogram, may not be getting the best screening for their circumstance. Supplemental imaging such as tomosynthesis (or 3D mammograms), ultrasounds, and MRIs can assist with cancer detection in the setting of dense breasts.

If a patient has dense breasts, she should review her breast cancer risk factors with her doctor and consider options for supplemental screenings.

Tip: Every patient and circumstance is different. Women with dense breasts should work closely with their doctor to determine the screening plan they're both comfortable with. Yearly screening mammograms are recommended for all women over 40 years of age.

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Aeisha Taylor has been in the radiology field for seven years, working as a mammographer for six of the seven years. She has worked for a diverse range of organizations including Baylor Scott & White, Texas Health Resources, and currently Parkland Comprehensive Breast Center. In her current role as a breast navigator, Aeisha guides patients through their journey for breast wellness. Aeisha is a member of North Texas Radiologic Technologist Society, Patient Navigator Action Coalition, and Coming Together for the Cure Committee. In 2016, she was named the Judges Choice out of the Top 25 Radiologic Technologists in North Texas. Her mission is to empower women by providing education and encouraging them to replace their fear with faith and facts.

Jennifer Schopp, MD
Breast Imaging Radiologist
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Dr. Schopp is a radiologist who specializes in breast imaging, including mammography, breast ultrasound, breast MRI, and breast imaging guided biopsies and pre-operative localization procedures. In addition to dedication to her patients, Dr. Schopp serves to teach radiology residents and fellows during their training. She graduated with honors from University of Texas Medical Branch in 2008, attended residency in radiology at University of Washington from 2009-2012, and completed her fellowship training in breast imaging at UT MD Anderson Cancer Center in Houston in 2013. Dr. Schopp's passion is to provide excellence in care, both clinically and at the bedside, through attention to detail in her role as a radiologist and in communication with patients.

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