



COMPLETE GUIDE TO

Breast Health and Mammography

Understanding risk factors, signs and symptoms, and the best methods for early detection

YOUR BREAST HEALTH AND WHY IT MATTERS

Is that a lump in your breast? You aren't sure; you don't really know what a lump is supposed to feel like. It wasn't there before, was it? You feel guilty because you haven't been keeping up with self-exams. You don't have time to get to the doctor right now, and it's scary to think about the possibility of breast cancer. You decide to wait and see if the lump changes. After all, it's probably nothing.

Here's an important fact about breast health:

[Eight out of 10 lumps](#) do not end up being breast cancer, according to BreastCancer.org.

And here's something else: If a lump is diagnosed as breast cancer but has not spread, the survival rate is [99 percent](#) (defined as five years of being cancer-free according to Cancer.net). So, if you're concerned, make an appointment, earlier rather than later. The odds are in your favor.

99%

**Survival rate if a lump is
diagnosed as breast cancer
but has not spread**



Dr. Nayana Dekhne

"Early detection gives patients lots of options for treatment," says Dr. Nayana Dekhne, director of the Comprehensive Breast Care Center at Beaumont Hospital, Royal Oak. "The earlier we find breast cancer, the easier it is to treat."

There's a lot of good news about breast cancer treatment and outcome today. But let's start by talking about breast health overall.

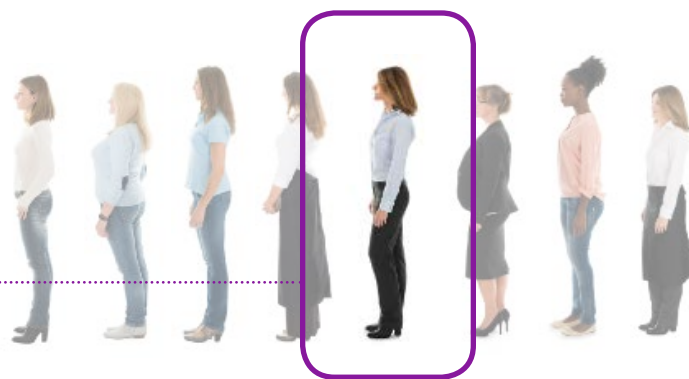
Are You at Risk for Breast Cancer?

Breast cancer is the No. 1 cancer diagnosed in women, according to the [National Breast Cancer Foundation](#). More than 250,000 women are diagnosed each year in the United States, and **one in eight will have it during her lifetime.**

Despite significant progress in treatment over several decades, breast cancer is the second leading cause of cancer death in women (and the top cause among [Hispanic women](#)), causing more than 40,000 deaths a year.

So, who is most at risk? There are factors that make some women more vulnerable to the disease than others. According to the [Centers for Disease Control and Prevention](#), they include:

- **Age:** The older you are, especially if you are over 50, the greater your risk.
- **Family history or certain genetic conditions:** If your mother, sister or daughter had breast cancer, or if several relatives have had it, your risk is higher. If you carry either of the gene mutations BRCA1 or BRCA2, your chances increase.
- **Early menstrual period (before age 12) or late menopause (after age 55):** Either increases exposure to estrogen over your lifetime, which increases risk by a degree.
- **Late pregnancy (after age 30):** Or no pregnancies increases risks of breast cancer.
- **Hormones:** Taking certain kinds of oral contraceptives before menopause or combination hormone therapy for more than five years after menopause may increase your risk.
- **Becoming overweight or obese after menopause:** This has shown to increase women's risks for breast cancer.



- **A lack of physical fitness:** Unhealthy lifestyles and obesity can contribute to increased risks for many health issues, including many forms of cancer, heart disease, and diabetes.
- **Previous diagnoses:** If you have previously had breast cancer, atypical hyperplasia or lobular carcinoma in situ, your risk increases.
- **Use of DES:** Women who were prescribed DES (a synthetic estrogen) in their pregnancies between 1940-1971 – and their daughters – have a higher risk.
- **Alcohol or smoking:** While the amount of alcohol in research studies varies, the risk for breast cancer generally rises with the amount you drink. Research has also suggested that smoking increases your risk.

There are things on the above list that you can control, and others that you can't. You can lose weight, improve your fitness, choose whether to take oral contraceptives or hormones, drink no more than moderate levels of alcohol, and quit smoking. For the other factors, your biggest weapon is awareness of your personal and family medical history and the increased risk that might represent. If several members of your family have had breast cancer, you may want to undergo testing for a genetic mutation (more about genetic testing later).

Self-Exams and the 12 Signs of Possible Breast Cancer

This is worth repeating: The survival rate for breast cancer is 99 percent when caught early.

Let's talk about options for early detection. Start with a self-exam, which is easy to do.

Step 1: Stand with your hands at your side in front of a mirror and look at your breasts. Note the differences in size – and don't be alarmed because this is normal – they should appear smooth and similar in appearance.

Step 2: Still standing in front of a mirror, raise your arms over your head and look for the same things.

Step 3: This step can be done standing in front of the mirror, but some women do this while in the shower or lying in bed. With your opposite hand, start at your nipple and feel the tissue underneath your skin as you move your hand in expanding circles. When you're finished, switch sides and examine the other breast.



Here are 12 things to be watchful for:

- a dimple in the skin of the breast
- feeling a thicker-than-typical area
- a crust around a nipple
- a red area (which also may be hot to the touch)
- skin sores
- a sunken nipple
- a protruding bump
- a vein that is becoming more prominent
- fluid from a nipple when you are not breast-feeding
- a bumpy area of skin similar to an orange peel
- a new shape or size of one of your breasts
- a hard lump

WHAT BREAST CANCER CAN LOOK & FEEL LIKE

Recognize something? Don't panic, some changes are normal. But if it stays around be smart—show a doctor.



"A cancerous lump usually feels hard and immovable like a lemon seed. It can be any shape or size."



Want information on each symptom?



knowyourlemons.com

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How Often Should You Do Self-Exams?

You should do breast self-exams at least once a month. If you're still menstruating, perform a self-exam about a week after your period starts. If you're no longer menstruating or post-menopausal, pick a day of the month and set reminders on your calendar.

If you're not used to what your breasts feel like, you'll notice all kinds of textures in breast tissue. Don't panic! This is perfectly normal (and it's why you need to do exams regularly, so you'll know what's typical for you). Your breast tissue includes fat, connective tissue, and milk ducts; some areas may feel like cottage cheese, or soft peas. Some bumps feel larger but are soft and move around – these may be your lymph nodes. You may feel hard spots; when you do, check your other breast to see if there's a similar spot, because you may be feeling your sternum or ribs. If an area feels painful, note it.

A cancerous lump will feel hard, like a citrus seed (though it can be any shape or size), and it won't move around as you examine it. If you think you feel one, don't hesitate – call your doctor. Remember, 80 percent of lumps are not cancer. But 20 percent are, and they need to be found as early as possible.

The National Breast Cancer Foundation estimates 40 percent of diagnosed breast cancers are detected by women who feel a lump, so establishing a regular breast self-exam is very important.



Mammography is Your Best (Breast) Friend

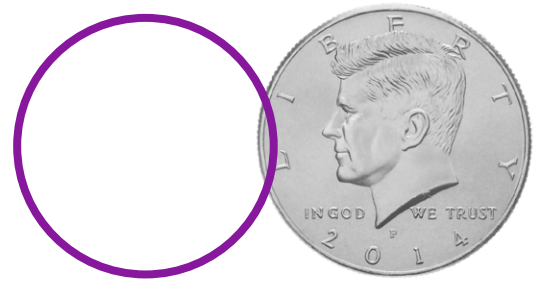
While self-exams are important, mammography machines – which take X-rays of your breast tissue – can find lumps much smaller than those you can feel by hand.

“When we look at outcomes in breast cancer, we look at stages of breast cancer,” says Dr. Dekhne. “And with mammography, the cancers that are detected by a mammogram by nature are much smaller and therefore earlier stage.”

She says cancers found by palpation, meaning by feel, are more often stage 2 or stage 3, and their outcomes may not be as good as those detected by imaging.

The average size lump found by each of the following women:

- A woman who finds a lump by accident: About 3.5 centimeters, close to the size of a half-dollar.
- A woman who does regular breast self-exams: About 2 centimeters, close to the size of a quarter.
- A woman who gets her first mammogram: About 1.5 centimeter, a little smaller than a dime.
- A woman who gets a yearly mammogram (which means her doctor can compare them from year to year): About 1 centimeter, the size of a normal pencil eraser.



3.5 cm



2 cm



1.5 cm



1 cm



2 Types of Mammograms: Screening and Diagnostic

[Screening mammograms](#) are what women without symptoms get annually to check for breast health. Diagnostic mammograms, on the other hand, are used when there is some sign that cancer may be present, such a lump, a discharge, an abnormality on the screening mammogram, or the other conditions named in the 12 things list above.

How to Prepare for Your Mammogram

Wear a two-piece outfit on the day of your mammogram, as you need to undress from the waist up. Don't wear deodorant or perfume. You will be given a gown to wear while you wait. When you are called into the mammogram room, you'll see a large machine and a technician.

For each breast, you will undo the gown on that side, raise your arm up over the

machine, and lean into it. The technician will position your breast in the machine between two flat plates and then compress your breast as you hold still. You will be asked to hold your breath for a moment while the X-ray is taken, and then the machine will release your breast.

In a screening mammogram, the whole procedure will probably take just 10 to 15 minutes.

In a diagnostic mammogram, the procedure may take longer. More X-rays of different angles will be taken, and the technician may zoom in on particular areas of interest.

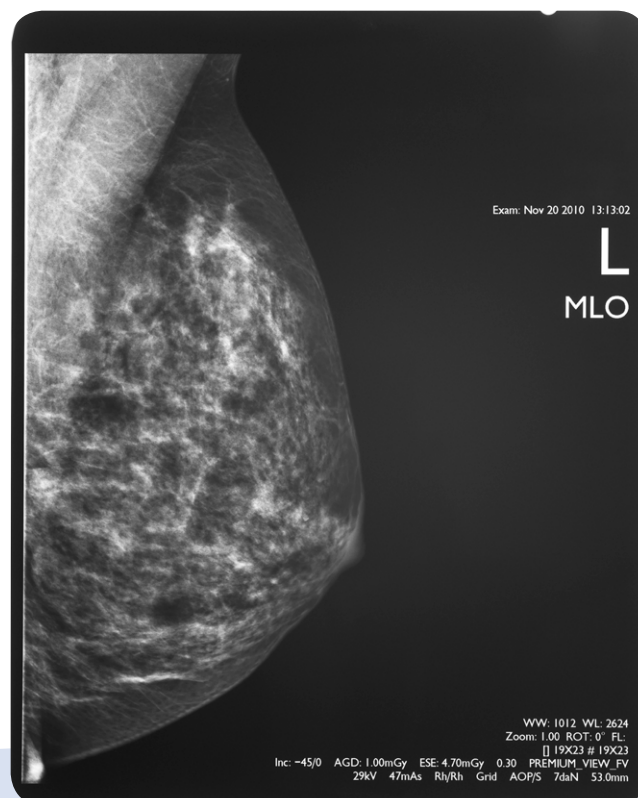
While your breast is compressed, there will be some discomfort and possibly some mild pain – the tissue simply isn't accustomed to being stretched and compressed. But the discomfort lasts only seconds and goes away as soon as the mammography machine releases the breast.

FAQs About Mammograms

It can be confusing to know [when and how often to have mammograms](#), since studies and even some authorities have different findings and recommendations.

- **At what age should a woman get her first mammogram?** The National Comprehensive Cancer Network (NCCN), a group of leading experts who detect, diagnose and treat breast cancer patients, says women of average risk should start getting mammograms at age 40.
- **How often should women get mammograms?** Are different frequencies recommended for women who are at low-risk, high-risk, or who are breast-cancer survivors? Yes:
 - **Low-risk women:** Less than 5 percent of breast-cancer diagnoses are in women younger than 40, according to the [Komen Foundation](#). Unless a woman has a known risk factor, there is no existing recommendation that she begin mammograms before age 40.
 - **Average-risk women:** The NCCN says average-risk women should get annual mammograms starting at age 40 and continue until their doctors believe they will no longer benefit because of other medical conditions.
- **High-risk women and breast-cancer survivors:** Women with one or more of the factors that increase risk should talk with their doctors about when to begin getting mammograms. Sometimes the starting age will be younger; sometimes the time between mammograms will be shorter.
- **Is it still recommended that women do self-exams?** If so, when and how often? Yes, self-exams are important – many breast lumps are found this way. Experts recommend doing them monthly, which is far enough apart to be able to feel a change.
- **What is the difference between screening mammograms and diagnostic mammograms?** Screening mammograms are routine annual scans for women with no breast symptoms. Diagnostic mammograms collect more information about a specific area seen on a screening mammogram or through physical or self-examinations. They are also sometimes used to collect details of possible indicators of breast cancer, such as a lump, breast pain or nipple discharge.
- **Is it important to have annual mammograms done at the same facility each year?** It's not critical, but it's smart. "One mammogram by itself doesn't tell you much," says Dr. Dekhne. "It has to be compared to the previous three to four years to notice a gradual change over the period of time." Dekhne tells patients who are moving to always take at least three years' worth of mammograms with them.
- **Why do mammogram technicians have to compress the breast to scan it?** By allowing the breast to be imaged compressed, the radiologist can see through it better making it easier to find abnormalities. Without adequate compression, cancers can hide within the tissue.

- **What's the best screening option for a woman with small breasts, dense breasts or breast implants?**
 - **Women with small breasts:** Self-exams may be easier on small breasts, but mammography recommendations remain the same.
 - **Women with very dense breasts:** There are four classifications of breast density: mostly fatty, scattered density, mixed density or extremely dense. In the first two, mammograms are likely to pick up any abnormalities. In the latter two, fibrous and glandular tissue can block the view of a mass in the breast. This is a critical issue, because [women with dense breasts are more likely to develop cancer](#), according to BreastCancer.org. Talk with your doctor; in some cases, a 3-D mammogram ([tomosynthesis](#)), MRI scanning and/or ultrasound may be used along with a mammogram.
 - **Women with breast implants:** Guidelines for mammograms remain the same, but the routine is slightly different. Women should let the mammogram facility know when she makes her appointment and let the technologist know before she begins. Because the X-rays don't sufficiently penetrate implants (silicone or saline) to show the tissue behind them, the technician will take four additional views with the implant pushed back toward the chest and the front part of the breast pulled forward.
- When is an MRI used for diagnosing breast cancer? MRI machines are so detailed that they pinpoint a lot of spots in the breast that are not cancer. Because of this, NCCN does not recommend that they be the only tool used to screen a woman's breasts. They are a powerful companion to mammography in women who are at high risk and are used in already-diagnosed cancers to help measure the size of the cancer and look for additional tumors in either breast.
- When is ultrasound used for diagnosing breast cancer? [Ultrasound of the breast](#) uses sound waves to penetrate tissue, so it is not invasive and there is no risk. It can be used to evaluate an abnormal area that was felt by you or your doctor, as a follow-up to an abnormal mammogram or MRI, or to help guide a biopsy needle in the breast.



How to Choose a Mammography Center

While choosing where to have your mammogram can seem like a small decision, the fact is that imaging centers with the latest technology and the most experience give their patients an advantage, especially in the accurate diagnosis of cancers in the earliest stages.

In southeast Michigan, Beaumont Hospitals' [Breast Care Centers](#) offer multi-faceted mammography technology, the largest genetic counseling program in the state, a multi-disciplinary approach to second opinions,

radiologists who are trained to read mammograms only, a high-risk follow-up clinic, ongoing patient advocacy and support, and 17 breast imaging locations across the region.

"Your mammogram is as good as the person who's reading it," Dr. Dekhne says. Beaumont's radiology department has met the American College of Radiology Gold Standard for Mammography, which represents a commitment to image quality and safety. The radiologists in the Breast Care Center are fellowship-trained in reading mammograms as their exclusive focus.



Leading-Edge Mammography

Beaumont's [Breast Imaging Center of Excellence](#) offers multiple kinds of imaging, depending on the needs of the patient:

- **Screening mammograms:** Standard digital imaging provides images of the breasts from two views.
- **Diagnostic mammograms:** Diagnostic mammography provides images from more angles, designed to evaluate areas of concern found on screening mammograms or symptoms found in exams.
- **3-D mammograms (tomosynthesis):** Like standard mammograms, tomosynthesis uses X-ray technology. Standard mammograms are two dimensional (2-D) while tomosynthesis provides 3-D views. The machine moves in an arc around the breast, taking multiple images. "Patients getting mammograms for the very first time or who have dense breasts or have strong family histories and are considered high-risk, we offer them tomosynthesis," says Dr. Dekhne. "And tomosynthesis has been known to detect more cancer than the standard mammogram." They are also used for certain diagnostic patients.
- **Breast ultrasound:** Used to evaluate an abnormal area that was felt by you or your doctor, as a follow-up to an abnormal mammogram or MRI, or to help guide a biopsy needle in the breast.
- **Breast MRI:** Breast MRIs find more breast cancers than mammography or ultrasound. Beaumont uses state-of-the art equipment and was the first in Michigan to perform MRI-guided biopsies of suspicious breast findings.

Genetic Counseling for Breast Cancer

The study of genetics in breast cancer is an ever-widening field, in large part because of the role it plays in early detection.

"In families and certain ethnicities where it's a known fact that they have a genetic predisposition, there is a role for testing for genes that cause breast cancer," Dr. Dekhne says.

A patient who goes for [genetic counseling at Beaumont](#) works with a staff member who takes a three-generation family history that includes all cancers – not just breast cancer – on all sides of the family tree.

With that information, the staff work to determine whether the patient carries certain genetic markers or mutations that would predispose him or her to that cancer. Actual DNA testing can determine the genetic markers involved. Some patients use the information to have risk-reducing surgeries to decrease their chances of developing breast cancer; others opt for close monitoring, which helps detect cancer in the earliest stages.

To schedule an appointment or ask questions about Beaumont's genetic counseling, call 248-551-3388 or visit Beaumont.org/services/oncology/genetics-programs.



Follow-Up Clinic for High-Risk Patients

Beaumont's high-risk clinic follows up with patients who are identified through genetic testing. They are followed by an internist and receive detailed clinical exams and access to clinical trials. They meet with nutritional counselors and naturopathic professionals who advise them on lifestyle changes that could help decrease their chances of developing breast cancer.

Ongoing Patient Advocacy and Support

Breast-cancer diagnosis and treatment are two branches of Beaumont's patient care; the third is patient advocacy and support. When a patient is diagnosed, a patient-care advocate and a nurse navigator are assigned. The care advocate reaches out and informs the patient of all the resources available; the nurse navigator works with the patient every step of the way.

"The navigators are really the mainstay of our cancer patients," Dr. Dekhne says. "They really hold their (patients') hands right from the minute of their diagnosis all the way to their survivorship, which is completion of treatment and starting their new life."

In addition, a support group offers expert talks, workshops and opportunities for women to share their problems and experiences with others going through the same thing, from treatment issues to emotional struggles.



Make a Connection

Beaumont Breast Care Center is dedicated to all aspects of dealing with breast cancer, from diagnosis to living as a survivor. If you have a concern, don't wait to get in touch.

With hospitals, medical centers and mammography centers, Beaumont covers the southeast region of Michigan with 17 locations.

Beaumont Hospital, Grosse Pointe

468 Cadieux Road
Grosse Pointe, MI 48230
313-473-1000

Beaumont Hospital, Royal Oak

3601 W. 13 Mile Road
Royal Oak, MI 48073
248-898-5000

Beaumont Hospital, Troy

44199 Dequindre Road
Area C, Suite 612
Troy, MI 48085

Beaumont Medical Park, Dearborn

18100 Oakwood Blvd.
Dearborn, MI 48124
313-438-7715

Beaumont Medical Center, St. Clair Shores

25631 Little Mack Ave.
St. Clair Shores, MI 48081

Beaumont Medical Center, Southgate

15777 Northline Road
Southgate, MI 48195
734-246-8100

Beaumont Medical Center, Warren

8545 Common Road
Warren, MI 48093
586-393-3000

Beaumont Imaging Center, Trenton

1676 Fort Street
Trenton, MI 48183
734-362-0900

Beaumont Breast Care Center, Trenton

Karen Colina Wilson Smithbauer Breast Care
Center
5400 Fort Street, Suite 230
Trenton, MI 48183
734-362-6787

Beaumont Cancer & Breast Care Center, Farmington Hills

27900 Grand River Ave., Suite 210
Farmington Hills, MI 48336
248-471-8120

Beaumont Breast Care Center, Wayne

4491 Venoy Road
Wayne, MI 48184
734-595-0316

Beaumont Digital Mammography & Laboratory, Birmingham

35046 Woodward Ave., Lower Level (L10)
Birmingham, MI 48009
248-633-2040

Beaumont Medical Center, Macomb

15959 Hall Road
Macomb, MI 48044
586-416-8400

**Beaumont Medical Center,
West Bloomfield**

6900 Orchard Lake Road, Suite 103
West Bloomfield, MI 48322
248-855-7435

**Beaumont Medical Center,
Rochester Hills**

6700 N. Rochester Road
Rochester Hills, MI 48306
248-650-1500

Beaumont Medical Center, Canton

7300 N. Canton Center Road
Canton, MI 48187
734-454-8001

**Beaumont Medical Center,
Lake Orion**

1455 S. Lapeer Road
1st Floor, Suite 103
Lake Orion, MI 48360
248-656-4300

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