

High Risk Breast Cancer Frequently Asked Questions

Breast cancer is a serious illness. Breast cancer is when abnormal cells grow and divide more quickly in your breast. These cells form a growth or tumor. The abnormal cells may enter nearby tissue and spread to other parts of the body. It is the type of cancer most often seen in women. Men can have breast cancer, but it is a rare condition.

What does it mean to be at high risk for breast cancer?

The average woman has a 12-15% chance of developing breast cancer at some point in her lifetime. However, some things about you may put you at greater risk of developing breast cancer. These are called risk factors. You may not be able to change some of these factors, however, there are risk factors you can control.

The main factors that put you at risk of getting breast cancer are being born female and getting older. If you have a strong family history of breast cancer, you may be at an increased risk of developing breast cancer. Inherited changes to the genes linked to breast cancer, such as BRCA1 and BRCA2, can also increase your risk of developing breast cancer.

How do I know if I am considered high risk? What exactly is my risk?

Your risk is a number score that shows what chance you have of getting breast cancer over your lifetime. That is calculated a number of different ways, depending on facts about you such as your age, family history, medical history, and lifestyle.

There are several ways to calculate this score. The most common tools we use are the **Tyrer-Cruzik Model** and the **Gail Model**. The Tyrer-Cruzik Model takes into account your

- Current age
- Age when you got your first period
- Age when your first child was born
- Age at menopause
- Height, weight, and body mass index (BMI)
- Length of time on hormone replacement therapy
- Number of first-, second-, and third- degree relatives with breast or ovarian cancer.
- Any first-degree relatives with cancer in both breasts
- Father or brother with breast cancer
- Genetic test results
- Breast density
- Personal history of breast biopsy results showing unusual cells, such as atypical hyperplasia and LCIS



The Gail Model is also called the Breast Cancer Risk Assessment Tool (BCRAT). It was adopted by the National Cancer Institute. The Gail Model uses your

- Current age
- Age when you got your first period
- Age when your first child was born
- Number of previous breast biopsies
- Number of biopsies with non-cancerous abnormal cells (atypical hyperplasia)
- Number of close (first degree) relatives with breast cancer
- Ethnic background

It is often used to determine if you are a good candidate for medications that may reduce your risk. Other tools you may encounter include the Claus Model, BRCAPRO and BOADICEA/CanRisk.

Now that I know I'm 'high risk,' what comes next?

Additional Screening

Research has shown that early detection can make a big impact on how successful cancer treatment can be. That's why we recommend high-risk patients get screened for signs of breast cancer more often. Your provider may recommend one or more of these screening tests.

- **Annual 3D screening mammogram (also called mammogram with tomosynthesis, or breast tomosynthesis):** Helps your provider see abnormal areas in the breast more clearly. In a 3D mammogram, multiple images are put together to complete the picture.
 - Start 10 years before your youngest family member was diagnosed with breast cancer, or when you turn 40, whichever comes first. **Example:** *Your youngest relative to get breast cancer was 47 years old when diagnosed. You should begin getting 3D mammograms every year at age 37.*
 - The youngest you should start is age 30.



If your 3D mammogram shows something abnormal, suspicious, or unclear, your provider may require a **diagnostic mammogram**. These are also used to assess something found during a breast exam, such as a lump. They are similar to screening mammograms, but often take longer. This test may only evaluate one breast. It might also use extra compression or magnification to get a better image.

- **Annual breast MRI:** Uses radio waves and powerful magnets to take images of the breast. A dye (contrast agent) enhances the images.
 - Start 10 years before your youngest family member was diagnosed with breast cancer, or you turn 40, whichever comes first.
 - Space these 6 months apart from your 3D screening mammogram. **Example:** *If your 3D screening mammogram is in April each year, get your MRI in October.*
 - The ideal time to schedule your MRI is during days 7-10 of your menstrual cycle. This gives the best images.
- **Annual contrast-enhanced mammogram:** Uses a contrast agent to improve mammogram images.
- **Annual screening mammogram with ultrasound:** Ultrasound uses high-energy sound waves to get images of the inside of the breast. It is often combined with annual 3D screening mammograms for high-risk patients.



Does annual screening increase my radiation risk?

The benefits of annual mammograms outweigh the risk of exposure to radiation. Most mammography machines use very low doses for breast x-rays. Annual MRI exams do not use radiation so there is no additional exposure. A typical mammogram – two views of each breast – exposes you to about 0.4 millisieverts (mSV) of radiation. A 3D mammogram can range from slightly less than or slightly more than a standard mammogram.

The average person is exposed to 3 mSV of radiation from their normal surroundings every year. That means a screening mammogram of both breasts typically exposes you to the same amount you'd get from day-to-day life in about 7 weeks.

Pregnancy and breastfeeding considerations

If you are pregnant, breastfeeding, or think you may become pregnant, it is important to continue your high-risk screening. Both breast ultrasounds and mammography can be safely performed during pregnancy and breastfeeding. Your belly can be shielded to protect your pregnancy. Talk to your provider about your options and to make a plan to continue your high-risk screening schedule.

Genetic Testing

Some high-risk patients may be candidates for genetic testing, depending on your family history. Genetic testing can identify changes in genes, chromosomes or proteins that signal certain types of cancer or cancer risk.

The high-risk clinic offers genetic testing and/or referral to a genetic counselor. If you are a strong candidate for genetic testing, we take a blood sample during your office visit. This is sent to the genetic testing company which tests as many as 70 genes for mutations linked to cancer.

Depending on the mutation found, a positive genetic test result may increase your overall risk of getting breast cancer. If this happens, your provider may recommend more frequent screening, preventative surgery, or risk-reducing medications. You may also be referred to other specialists to screen for other types of cancer if those markers appear in your genetic test.

How can I reduce my risk of developing breast cancer?

Talk to your provider about ways you can reduce your risk of developing breast cancer. They may suggest one or more of these options.

Chemoprevention

You may be a good candidate for chemoprevention if you

- Have a Gail score of 1.7 or higher
- Have a Tyrer-Cuzick or IBIS 10-year risk of 5% or higher
- Had radiation of your chest or chest wall (thoracic) before you were 30
- Have a history of tests showing evidence of disease such as LCIS (lobular carcinoma in situ) or atypical hyperplasia (ADH or ALH)

Risk-reducing mastectomy

Mastectomy is a surgery in which all breast tissue is removed from the breast. You may be a good candidate for a risk-reducing mastectomy if you

- Have a strong family history of breast cancer
- Had radiation of your chest wall before you were 30
- Have genetic test results showing mutation(s) known to significantly increase your risk of breast cancer (high penetrance breast susceptibility genes), such as
 - TP53
 - PALB2
 - PTEN
 - BRCA1
 - BRCA2
 - CDH1
 - STK11

Lifestyle Changes

You can also help reduce your risk by changing those factors you can control, such as diet, exercise, smoking, alcohol use, and certain medications.

- Keep to your screening schedule
 - 3D mammogram once a year
 - Breast MRI once a year
- Do a self breast exam once a month (if you still get a period, do it 2-3 days afterwards)



- Schedule a breast exam with your provider every 6-12 months
- Maintain a healthy Body Mass Index (BMI). Eat lots of vegetables, fruits, lean proteins. Limit the amount of fatty foods you eat.
 - If you have already passed menopause, keep your BMI below 25 to reduce your breast cancer risk. Obesity is a risk factor for estrogen receptor positive breast cancers after menopause.
- Exercise more, and more often.
 - Take part in 150 – 300 minutes of moderate-intensity physical activity each week.
- Stop smoking. The carcinogens (cancer-causing chemicals) in tobacco may cause breast tumors to form. They may also cause more aggressive types of breast cancer.
- Limit how much alcohol you drink. Any alcohol can increase your risk of breast cancer.
 - Drink only one drink per day, only 3 days a week
- Avoid hormone replacement therapy (HRT). HRT increases your risk of developing breast cancer. Your risk may vary based on
 - the kind of HRT you take
 - your dosage
 - how long you use it
 - how old you are when you begin HRT



What if I have more questions?

Your Ochsner provider can answer any of your questions and help develop a screening and prevention plan that best manages your individual risk of developing breast cancer. Feel free to send a message using the MyOchsner patient portal or call the clinic at **225-388-6310**.



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