



## WHAT ARE CANCER SCREENINGS AND WHY ARE THEY IMPORTANT?

**Cancer Screening** is the process of checking for cancer cells that are present - or abnormal cells that could become cancer - often before symptoms appear.

The **goal of screening** is to detect cancer early, or prevent it from starting, which can lead to better treatment outcomes and higher survival rates.

These routine, preventive tests **can - and do - save lives.**

## TYPES OF SCREENINGS

**Breast Cancer** screenings may depend on your family history and risk factors.

- **Mammogram** - For breast cancer, the most common screening is a **mammogram**, which is an x-ray picture of the breast. Standing in front of a special, low-dose x-ray machine, a technician will position you and place one breast at a time on a platform. The technician will then press another platform on top, squeezing the breast and flattening the tissue to get a clear, detailed picture.
- **MRI** - If you have dense breasts or have a high risk due to family history, you may have an **MRI - Magnetic Resonance Imaging**. This non-invasive procedure uses radio waves, a strong magnet, and a computer to create detailed pictures of the inside of the breasts. For an MRI, you will need to remove all metal on your body, including jewelry, hair clips, and underwire bras. You will lay face down on a padded table, with your breasts put in hollowed-out openings. The table then slides into the MRI machine, like driving into a tunnel. During the MRI, you must lay because movement can cause the images to become blurry. The machine can be loud, so you may be given headphones to block out the sound.
  - During an MRI, you may have a **contrast dye** (gadolinium) injected into your arm through an IV. This dye can help doctors can see abnormal tissue better.
- **Ultrasound** - If you have dense breasts, you may have an **ultrasound**, which uses high-energy sound waves to take pictures of the inside of the breast. It is not an X-ray, which means there is no radiation involved. For a breast ultrasound, you will likely need to remove clothing from the waist up and put on a gown. You will lie on your back on an exam table, often with one arm, or both, raised above your head. A technician (sonographer) will apply a warm, clear, water-based gel to your chest and surrounding area - the gel helps the sound waves travel. The technician will now move a small, handheld wand (transducer) over the gel and skin - it sends sound waves that bounce off the tissue to create live images on a screen.



## SCREENING RECOMMENDATIONS FOR BREAST CANCER

Screening recommendations may depend on your gender, family history, and risk factors.

- For **women** ages 40 - 54 with an average risk of breast cancer, yearly mammograms are recommended, and for ages 55 - 74, mammograms are recommended every 2 years. For **women with high risk** (family history, genetic mutations) mammograms may start earlier, often 10 years before the youngest affected relative's diagnosis.
- While mammograms are not generally recommended for **men with average risk**, **men with high risk** due to family history may start annual mammograms at age 50.
- Breast cancer screening for **transgender** individuals is based on risk factors, age, and hormone use. **Transgender women (assigned Male at Birth)** with 5 -10 years of feminizing hormone use should have mammograms every two years starting at age 50. **Transgender men (assigned Female at Birth)** should follow cisgender female guidelines for mammograms unless top surgery was performed.

## GENETIC TESTING

Picture that your body is a computer and your cells are the mechanisms that keep the computer running. When the mechanisms are working as they are should, all is well. But, if the mechanisms are damaged or corrupted, they begin acting like a virus and start doing their own thing, damaging the computer, stopping it from working well or working at all.

That's a long way to say that our bodies are made up of cells that, when directed by our genes, work a certain way. But, If a gene has a mutation - a blueprint that directs it to work other than it should - that can put you at a higher risk for developing certain cancers, like breast cancer.

Using a blood or saliva sample, **genetic testing** is a laboratory analysis of your DNA to see if you have any genes carry any mutations. While having a mutation does not mean you will get cancer, this knowledge can allow you and your medical team to take proactive, personalized approach, or preventative measures. It can also help inform your family members about their own potential risks, enabling early detection or prevention.

- Roughly **5 to 10 percent of breast cancers** are associated with **inherited gene mutations**. The most well known breast cancer genes are BRCA1 and BRCA2, but others include PALB2, TP53, CHEK2, and ATM.

## ABOUT US

Our mission is to reach **all** people impacted by cancer - those diagnosed, their loved ones, and caregivers - so that **no one** faces cancer alone.

All our programs and services are **FREE** to our members.