



Breast Cancer

Breast cancer is the second-most commonly diagnosed cancer among women (skin cancer is the first) and is a serious health issue in the U.S. That being said, most women who have breast cancer today are diagnosed at an early stage and they, with the help of newer, more effective treatments, have productive lives as cancer survivors.

Breast cancer, the result of out-of-control growth of cells of the breast, is a complex disease; there are more than 10 types of breast cancer. Once the type of cancer is known, it is critical to determine the extent of the disease; a staging system is used to guide treatment and offer insight into prognosis.

The earlier a woman is diagnosed with breast cancer, the better her chances are for successful treatment. Legacy has a range of services to help. The Breast Health Centers at Legacy Good Samaritan, Legacy Salmon Creek and Legacy Meridian Park hospitals are dedicated to breast health, providing routine and diagnostic mammograms. Services include the R2 Imagechecker®, a computer-assisted detection (CAD) system the radiologist uses as an additional tool for the detection of potential cancer. Ultrasound and biopsies (including stereotactic needle biopsy) assist with early cancer diagnosis.

Risk Factors

Every woman has the capability of developing breast cancer; the chances increase as a woman grows older. Other risk factors (factors that increase a person's chance of getting a disease) for breast cancer include:

- **Gender.** Breast cancer is about 100 times more common among women than men.
- **Family history.** Most breast cancer is not related to family history. But breast cancer risk is higher among women whose close blood relatives have this disease. Having one first-degree relative (mother, sister, or daughter) with breast cancer approximately doubles a woman's risk, and having two first-degree relatives increases her risk fivefold.
- **Personal history of breast cancer.** A woman with cancer in one breast has a three- to four-fold increased risk of developing a new cancer in the other breast or in another part of the same breast. This is different from a recurrence of the first cancer.
- **Race.** Caucasian women are slightly more likely to develop breast cancer than are African-American women. Asian, Hispanic, and American Indian women have a lower risk of developing breast cancer.
- **Previous breast biopsy.** Women whose earlier breast biopsies were diagnosed as proliferative breast disease without atypia or usual hyperplasia have a 1.5 to two times greater risk of breast. A previous biopsy result of

atypical hyperplasia increases a woman's breast cancer risk by four to five times.

- **Previous breast irradiation.** Women who have had chest area radiation therapy as a child or young woman as treatment for another cancer are at significantly increased risk for breast cancer.
- **Menstrual periods.** Women who started menstruating before age 12 or who began menopause after age 50 have a slightly higher risk of breast cancer.
- **Late or no child-bearing.** Women who have had no children or who had their first child after age 30 have a slightly higher breast cancer risk.
- **Alcohol.** Use of alcohol is clearly linked to increased risk of developing breast cancer. Women who have two to five drinks daily have about 1.5 times the risk of women who drink no alcohol.
- **Obesity.** Being overweight is associated with an increased risk of developing breast cancer, especially for women after menopause.
- **Physical inactivity.** Recent studies indicate that strenuous exercise in youth might provide life-long protection against breast cancer, and that even moderate physical activity as an adult can lower breast cancer risk.

The fact remains that no single risk factor is responsible for the development of breast cancer.

Medical researchers are making advances into explaining how genes are related to cancer and other diseases. However, there is still much uncertainty. For a free information packet on risks and prevention, please call Legacy Cancer Prevention & Risk Assessment Program at 503-413-6534 or 1-800-220-4937.

Diagnosis

Combining monthly breast self exams with periodic mammography and professional breast exams is the best insurance that if a breast change does occur, it will be detected, diagnosed and treated as early—and perhaps successfully—as possible.

Widespread use of screening mammography has increased the number of breast cancers found before they cause any symptoms. However, some breast cancers are not found by mammography, either because the test was not done or because, even under ideal conditions, mammography cannot find every breast cancer. For example, up to 15 percent of mammograms are negative when a certain type of breast cancer exists. That is why it is imperative that mammography be combined with monthly breast self-exam and an annual breast exam by a healthcare provider.

The most common sign of breast cancer is a new lump or mass. A mass that is painless, hard, and has irregular edges is more likely to be cancerous, but some rare cancers are tender, soft, and rounded. For this reason, it is important that any new breast mass or lump be checked by a healthcare provider with experience in diagnosis of breast diseases. If a lump is felt, an ultrasound should be done in addition to a mammogram.

Other signs of breast cancer include a generalized swelling of part of a breast (even if no distinct lump is felt), skin irritation or dimpling, nipple pain or retraction (turning inward), redness or scaliness of the nipple or breast skin, or nipple discharge (other than breast milk). Sometimes a breast cancer can spread to underarm lymph nodes that are obviously enlarged, even before the original tumor in

the breast tissue is large enough to be felt. Be sure to talk to your doctor if you have any of these symptoms.

If your doctor believes there is a reason to suspect you have breast cancer, he or she will use one or more of the following methods to determine if the disease is truly present.

- **Medical history and physical exam.** First your doctor will ask you about your medical history to determine your risk factors and then perform a physical exam to confirm your symptoms.
- **Imaging tests.** Three tests may be performed to give the doctor more information about the cancer and whether it has spread:
 - **Mammogram.** a low-dose X-ray of the breast.
 - **Ultrasound.** a non-invasive test using sound waves to see if the mass is filled with fluid or solid material.
 - **Ductogram.** Also called a galactogram, a special mammogram that uses contrast to help see the ducts within the breast tissue.
 - **MRI.** Magnetic resonance imaging, used only in certain cases.
- **Biopsy.** A tissue sample is removed from the breast for examination under a microscope.

Treatment

Treatments of breast cancer have changed and improved over the years. Today, many women with breast cancer go through treatment and have happy, fruitful lives. There are many ways to treat breast cancer and it is helpful to learn all you can so you can make informed decisions along with your doctors. The following are the most common treatments:

- **Breast conserving surgery.** Often known as a lumpectomy, this is the surgical removal of the area of the breast that is cancerous. Underarm lymph nodes may also be removed. While the breast is saved and the surgery is less invasive, radiation therapy may be required to reduce the risk of recurrence.
- **Mastectomy.** This is the surgical removal of the entire breast and usually some underarm lymph nodes. Mastectomy is a more invasive procedure than a lumpectomy and may have an emotional impact. However, radiation therapy often is not needed, and there are several options for reconstruction.
- **Radiation therapy.** X-rays are used to destroy cancer in the breast and axillary lymph nodes. It is most often used with breast-conserving surgery, but may also be recommended after a mastectomy for women whose cancer has worrisome features.
- **Chemotherapy.** Drugs are given to kill cancer cells, often over a period of three to six months. There are several possible side effects.
- **Hormone therapy.** Drugs, such as tamoxifen, may be given after surgery to prevent hormones, especially estrogen, from promoting the growth of cancer cells. There are several possible side effects.

Legacy's Innovative Cancer Care

Legacy hospitals are leaders in innovative treatments for cancer patients. Our team of cancer specialists stay on the forefront of new and innovative cancer treatment and modalities.

Research Studies

Legacy hospitals participate in clinical trials sponsored by the National Cancer Institute through a cooperative group effort with Columbia River Oncology Program . Women are enrolled into studies by their treating physician through this program.

Legacy Health System also conducts cancer clinical trials (research studies) through the Legacy Research Department. Studies cover a range of breast cancer diagnoses and treatment as well as prevention and support strategies. Information on these studies is updated monthly.

As an example of our work in cancer research, Legacy was one of the first institutions nationally to study breast sentinel node biopsy. This technique is now considered a standard part of many breast cancer surgeries.

For more information, contact your physician about what research trials might be appropriate for you.

Breast Brachytherapy

The standard radiation therapy for breast cancers after lumpectomy surgery is "external beam whole breast irradiation." It is the most common and established treatment approach with excellent outcomes and cosmetic results.

A newer approach, with early favorable results, is "accelerated partial breast irradiation," often referred to as "breast brachytherapy." Legacy Cancer Services was the first in Oregon to offer brachytherapy to selected breast cancer patients. Brachytherapy is a more targeted and limited radiation therapy that focuses radiation on a smaller area and can be given in a shorter period of time. For some women it offers a good treatment alternative to standard radiation therapy, but it is not appropriate for all patients.

Legacy is currently participating in a national study of breast brachytherapy. The study examines three types of treatment: balloon catheter brachytherapy (Mammosite), multi-catheter brachytherapy, and 3D conformal external beam irradiation. Legacy is the only regional facility approved to use all three techniques in the national study.

Support

Legacy Health System sponsors a variety of support groups for people who have cancer and their families and friends.

Living with a diagnosis of cancer and its treatment can have a profound impact on an individual's functional, emotional, social and spiritual needs. Cancer Rehabilitation and Outpatient Support Services has experienced, professional staff dedicated to cancer patients. They provide a variety of services designed to assist patients and their family members achieve the highest quality of life possible. Call one of the numbers below for more information.

Cancer Rehabilitation and Outpatient Support Services:

- Legacy Emanuel Hospital, 503-413-1500
- Legacy Good Samaritan Hospital, 503-413-7753
- Legacy Meridian Park Hospital, 503-692-7416
- Legacy Mount Hood Medical Center, 503-674-1123
- Legacy Salmon Creek Hospital, 360-487-3750
- Toll-free number: 1-800-220-4937

Links

- American Cancer Society - http://www.cancer.org/docroot/CRI/CRI_2x.asp?sitearea=LRN&dt=5
- National Cancer Institute - www.cancer.gov/cancer_information/cancer_type/breast/
- National Breast Cancer Foundation - <http://nationalbreastcancer.org/index.html>
- MedlinePlus - <http://www.nlm.nih.gov/medlineplus/breastcancer.html>
- Susan G. Komen Foundation - www.breastcancerinfo.com
- Imaginis - www.imaginis.com/breasthealth
- www.breastfriends.com

Note: This information is designed for educational purposes only and is not to be used as a substitute for professional medical advice.

Legacy Health System, a non-profit organization, includes Emanuel Hospital & Health Center, Emanuel Children's Hospital, Good Samaritan Hospital & Medical Center, Meridian Park Hospital, Mount Hood Medical Center, Salmon Creek Hospital, Visiting Nurse Association, Legacy Clinics and CareMark/Managed HealthCare Northwest PPO.